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Canada. Court of Investigation into the circumstances attending the loss of the S.S.Noronic, 1949

Report.



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REPORT

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COURT OF INVESTIGATION INTO THE CIRCUMSTANCES ATTENDING THE LOSS

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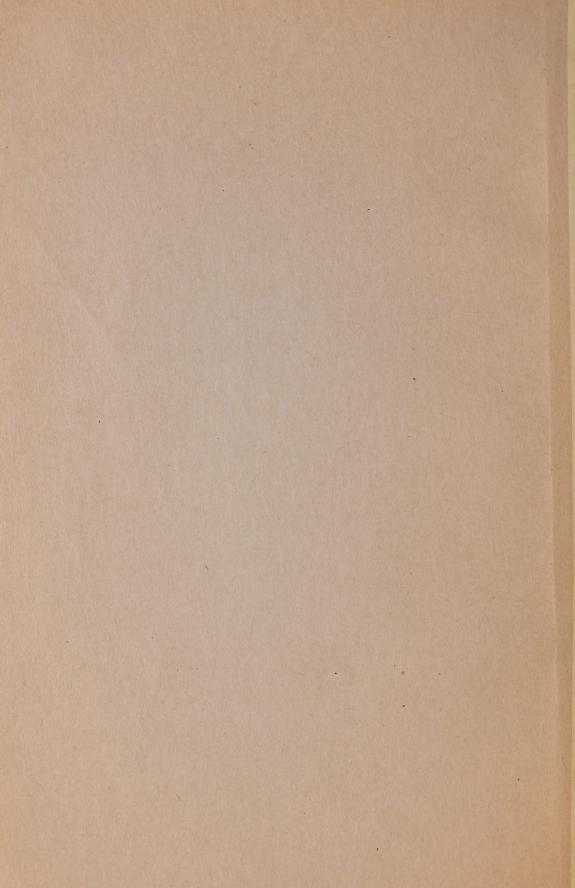
S.S. NORONIC

In Toronto Harbour, Ontario, on September 17, 1949.

Published by Authority of the Hon. Lionel Chevrier, K.C., M.P., Minister of Transport.



OTTAWA
EDMOND CLOUTIER, C.M.G., B.A., L.Ph.,
KING'S PRINTER AND CONTROLLER OF STATIONERY
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1949

COURT OF INVESTIGATION

S. S. "NORONIC"

The Honourable Mr. Justice R. L. Kello	ck	Commissioner
Neil B. Gebbie		Assessor
Captain H. S. Kane		Assessor
Captain Robert Mitchell		Assessor

and white damage	MELLEN THE LINE OF
Counsel appear	ring were as follows:
J. W. Pickup, K.C. W. J. Matthews John T. MacQuarrie, K.C. and John M. Godfrey Frank Wilkinson, K.C. H. Hansard, K.C. T. R. Ker, K.C. Peter Wright and L. C. Hinslea	For the Department of Transport For Canada Steamship Lines Limited and Officers
C. P. Hope, K.C. and C. W. Caskey, K.C.	For the Attorney-General of Ontario
T. Vincent Martin	For the Attorney-General of the State of Ohio
J. J. Robinette, K.C. H. Ward Allen and J. W. Brooke	For Seafarers' International Union
W. K. Campbell	Registrar

REPORT

In pursuance of my appointment by the Honourable, the Minister of Transport, dated the 19th day of September, 1949, as authorized by section 551 of the Canada Shipping Act, I proceeded to hold a formal investigation into the circumstances attending the loss by fire with heavy loss of life of the S. S. "Noronic" in the harbour of Toronto, Ontario, on the 17th day of September, 1949, sittings being held at the said City of Toronto on the 28th, 29th and 30th days of September, the 3rd, 4th, 5th, 6th, 7th, 11th, 12th, 13th, 14th, 17th, 18th, 19th, 20th and 21st days of October, the 7th day of November, and at the City of Ottawa on the 21st day of November, 1949.

The vessel arrived at Toronto at approximately 6.00 p.m., standard time, on September 16th, and docked at Canada Steamship Lines' pier 9, with her bow to the north and her starboard side alongside the dock to the east. Fire was discovered on board in the neighbourhood of 1.30 a.m., standard time. When the first fire-reels of the Toronto Fire Department arrived at about 1.41 a.m., the ship was substantially in flames, with the exception of parts of the bow and stern. The vessel became completely gutted and by reason of the weight of water poured into her, settled on the bottom of the harbour with the water of the lake up to or over the deck level at the stern of "D" deck. Of a total passenger list of 524 persons there were 406 who survived, there being 104 dead and 14 missing. None of the crew of 171 was lost.

The vessel, which was 362 feet B.P., of five deck construction, on three of which, "A", "C" and "D", passengers were accommodated, was a steel vessel—that is, the hull, decks and superstructure were of steel, with the exception that on "A" deck the passengers accommodations were entirely of wood. On the other decks all the steel portions of the cabins and corridors were sheathed or panelled with wood and the partitions dividing the cabin structure into passenger state-rooms were also of wood. On "A" deck the section in way of the life-boats, which occupied a substantial portion of the deck, was wood sheathed, as was the deck in the crew's recreation room aft.

On "B" deck, the deck of the observation room or dance hall was wood sheathed, while the deck of the dining room was covered by congoleum cemented to the steel, with carpet runners between the tables. The deck covering on the after part of the deck was said to be of fireproof composition in the galley, while the deck in the crew's cafeteria was covered with linoleum.

There was the usual amount of carpet runners in all the passenger cabins and the corridors, as well as the usual amount of furniture, bedding, linen, mattresses, etc., of a combustible nature. According to Captain Taylor, the ceilings

throughout the ship were covered either with canvas or masonite.

The interior of the various decks created avenues for the rapid advance of the flames once the fire made its way out of the confined space where it originated. On "A" deck the officers' quarters and pilot house occupied the extreme forward end, while the ship's bunkers and crew quarters aft of them occupied the aft part of the deck. Intervening, and on each side of the ship, there was a single row of outside staterooms. The space between these two rows of staterooms was occupied by a "social hall", in the forward part of which there was a well opening down through "A" and "B" decks to "C" deck below. Outside the cabin structure on "A" deck, the deck was open and the life-boats were here disposed on both sides, with the exception of a small promenade portion of the deck around the crew's quarters aft. There were also two life-boats located on the hurricane deck, which is merely the roof of the cabin structure of "A" deck.

On "B" deck the dining-room amidships and the observation room, or dance hall, forward of the dining-room together occupied two-thirds of that deck, the after portion of the deck being taken up by the galley, store-rooms, crew's cafeteria, ice-making machines, etc. "B" deck had also an outside or promenade portion running around the observation room from forward of the dining-room. In the center of the observation room there was the well opening down to "C" deck. There were no passenger staterooms on "B" deck.

On "C" deck, for its entire length, with the exception of the lounge at the stern of the ship, there were two rows of staterooms running around the outside walls of the superstructure, except right amidships, where a "social hall" occupied the central portion of the deck. Between these rows of staterooms there was a corridor. Some distance aft of the social hall the corridor was broken into two and these corridors ran back on each side of the ship's bunkers into the lounge. The space in between the bunkers and the lounge in the center of the aft portion of the deck was occupied by a store-room, a men's washroom, a ladies' washroom and two linen lockers.

On "D" deck the extreme forward end was occupied by a windlass room, behind which there were the maids' quarters. The extreme after end was occupied by quarters for others of the crew and the entire space in between was occupied by passenger staterooms, separated by a central corridor running from the maids' quarters to a social hall amidships and from there aft to the ship's bunkers where, as in the case of "C" deck, it divided into two, which continued aft to the crew's quarters.

All of the ship's accommodation doors were of wood and there was a vent covered by a metal grill near the top of each door opening into the passenger staterooms. These vents provided a means of entry for the flames sweeping along the corridors and at least one passenger testified as to the entry of fire to her cabin by this means.

"E" deck, also known as the "main" or "freight" deck, was taken up entirely by cargo spaces in the forward part of the deck, with the engine and boiler room casings and crew accommodation in the after part. The only portion of this deck used by passengers was directly amidships, where the passenger or number 4 gangway door on either side opened into an entrance hall leading to the central stairs leading to the upper decks. The profile plan of the ship shows seven ship-side doors from this deck, number 4, as already mentioned, being the passenger gangway door, the others being freight or engine room doors. As the ship lay at dock in Toronto on the night in question, the only means of ingress, or egress, so far as passengers were concerned, was from the number 4 gangway amidships. The other gangways, of which Nos. 3 and 5, as well as the engine room gangway on the starboard side were open, were not known and were not readily discoverable by passengers. At Port Arthur debarkation and embarkation took place on "C" deck. On the pier at Toronto where the ship docked, there was an overhead ramp which might have given access to "C" deck had the ship been "spotted" for it. It was designed for use by the "Cayuga" and was not in fact used by the "Noronic".

Stairways

With respect to stairways, the crew's stairway in the stern of the ship led up from the engine room on "E" deck all the way to "A" deck. The only place however, where this stairway would be readily accessible to passengers was at the "C" deck level where it could be entered on the port side immediately forward of the lounge.

Forward of the crew's quarters on "D" deck the aft passenger stairway led up to "A" deck. Amidships there was the main stairway commencing at "E" deck and going up through the center of the ship as far as "C" deck, the stairs

from the last mentioned deck up to "A" deck being situated on both the port and starboard sides of the ship. At the forward end of "D" deck there was also a stairway, narrower than the main stairway, leading up out of the corridor between the passenger staterooms to "B" deck, and in the bow of the ship outside the cabin structure there was a stairway from "A" deck to "D" deck, but from "C" deck down to "D" deck this stairway led into the windlass room.

Painted and Varnished Surfaces

In the interior of the ship the passenger berths on "A" deck, the panelling in the dining-room on "B" deck, which had recently been refinished, as well as the observation room, and the whole of the corridors and social hall on "C" deck were varnished. "D" deck accommodation was painted with an ivory paint. The interior of all the passenger cabins was painted.

Dr. C. Y. Hopkins, a research chemist of the National Research Council, who has been engaged since in or about the year 1934 on research on paints and varnishes, gave evidence with respect to the comparative combustibility of surfaces which have been coated with paint or varnish. He testified that varnish is composed of oils and resins, and paint of oil, resin, pigment, (usually mineral), a solvent and drier. When varnish dries it solidifies without very much penetration of the wood. In the case of paint there is even less penetration, the pigment of the paint helping to hold it on the surface. According to Dr. Hopkins, the ordinary dried paint coating has a relatively low flammability, being considerably less flammable than wood itself. The pigment, being mineral, does not burn and helps to prevent the remainder from burning. In the case of a coating of paint, after drying, the pigment will average 50% or more of the coating, in many cases reaching 75%.

Dr. Hopkins said that unpainted wood exposed to heat will burst into flame at approximately 500 degrees F. If the wood be coated with paint the paint itself, will not ignite until a temperature of about 900 degrees is reached. His conclusion was that, generally speaking, unpainted wood is easier to ignite and will burn faster than wood which has been painted and the thicker the paint coating probably the less readily will the wood catch fire. Varnish is more combustible, being composed entirely of combustible matter and is somewhat more flammable than wood itself. Dr. Hopkins pointed out that wood itself gives off gases during combustion, as will paint and varnish. These gases push along the surface and carry the fire. With respect to smell, he said that the smell of varnish or paint burning is always readily noticed and one is inclined to blame the paint or varhish unduly because that is what is smelt, the gases from wood having less odor.

The witness took some samples from the "Noronic" and found that the paint on them was of ordinary composition. The thickness of various coatings varied from one one-thousandth of an inch up to twelve one-thousandths. The ordinary thickness of a coat of paint applied by brush is about one and one-half one-thousandths. The amount of pigment in the samples varied from 65% to 74% in the case of the four thickest samples.

Dr. Hopkins said that all of the paints used on the samples he found were to some extent fire retarding when applied to wood.

With respect to fire resisting or fire retarding paints, generally, the witness said that they have an appreciable effect in retarding the ignition and rate of burning of wood in the initial stages but that in a very hot fire their effectiveness is in doubt. This fire retarding value also, is obtained at the expense of some other qualities, such as water-resistance, lack of washability, and resistance to

weather. Dr. Hopkins said that there is fire resistant paint which has been in use in this country for a few years which, if fire were in a room so painted, would probably prevent it from spreading outside the room. If however, there were textiles in the room Dr. Hopkins said he would find it hard to express an opinion as to the ultimate result. With respect to its use on a ship such as the "Noronic", he gave the following evidence:

- "Q. Well would you recommend from your experience the use of such a paint for the "Noronic"?
- A. Taking all considerations into account I would not wish to recommend it—not without further studies."

He said that if sufficient heat is generated, paint will not prevent a fire spreading, as such heat will cause the wood to break down and give off combustible gases which will break through the paint holding it, with the result that the fire will then commence to spread.

LEGISLATION, INCLUDING REGULATIONS

Before dealing with the actual events of the night in question, it is relevant to consider the background of legislation and regulations to which the ship and its owners were subject.

Fire-Resistant Bulkheads

Under the provisions of section 405 (1) (a) of the Canada Shipping Act, cap. 44, of 1934, regulations were passed on the 7th of July, 1939. Regulation 38 (1) reads:

"Ships shall be fitted above the bulkhead deck with fire-resisting bulkheads of such construction, and so fitted, as to serve the purpose of retarding the spread of fire. The mean distance between any two consecutive bulkheads of this description shall not in general exceed 131 feet. Recesses and steps and the means for closing all openings in these bulkheads shall be fire-resisting and flametight."

The "bulkhead deck" is the uppermost deck to which the transverse water-tight bulkheads are carried. In the case of the "Noronic" this was "E" deck.

Regulation 47 provides that:

"The Chairman of the Board of Steamship Inspection may, in his discretion, exempt an 'existing' ship from any of the regulations hereinbefore contained where, in his opinion, compliance with any such regulation would be impracticable or unreasonable."

The "Noronic" was built in 1913 and had been constructed without any fire-resisting bulkheads. She was not required to comply with the provisions of regulation 47, the exemption taking the form of a certificate stating that the ship had complied with the regulations. There is nothing in the records of the Board as to the reason for this decision but the evidence indicates that other existing ships were similarly treated. As far as the "Noronic" is concerned, it was not "impracticable", on the evidence, to install fire-resisting bulkheads in accordance with the regulations. It must therefore be assumed that the Chairman considered that, from the standpoint of expense, it would be unreasonable to require compliance.

Fire Alarm or Fire Detecting Equipment

Under the authority of section 405 (1) (c) of the Act, regulations were passed on the 2nd of February, 1937. For the purpose of these regulations steamships are divided into classes, the "Noronic" falling with Class A. The third regulation is as follows:

"On every ship of Class A which is engaged on an international voyage, an approved fire alarm or fire-detecting system shall be provided which will *automatically* register at one or more points or stations in the ship, where it can be most quickly observed by officers and crew, the presence or indication of fire in any part of the ship which is, in the opinion of the Board, not accessible to a fire patrol system."

The regulations themselves do not define "international voyage" but if the definition contained in section (2), subsection (43) of the Statute, be considered applicable, the "Noronic" would not come within regulation (3) as it was engaged on an "inland voyage" on the Great Lakes, as defined by section (2), subsection

(40).

Some question arose in 1938 as to whether the statutory definition of "international voyage" was to be applied to the regulations. This resulted in a ruling of the Board of Steamship Inspection of the 15th of March 1938, based on the provisions of subsection (2) of regulation 37, which authorized the Board, on such conditions as it should think fit, to exempt any ship "which is a steamship certified to carry more than twelve passengers on international voyages, the keel of which was laid before the first day of July, 1931, or any other ship, the keel of which was laid before the first day of August, 1936, from any of the requirements of these regulations if they are satisfied that that requirement is either impracticable or unreasonable in the case of that ship". The ruling is in part as follows:

"(1). The Board has decided to make certain general exemptions in respect of the above mentioned Regulations, and the following is for the information of Inspectors.

(2). Fire detection—Regulation 3

Regulation XLIII of the Safety Convention requires that an efficient fire patrol system shall be maintained on every ship which carries a Safety Certificate, and it is proposed, at an early date, to make a similar regulation under the provisions of paragraph (h) of subsection (1) of section 447 of the Canada Shipping Act, 1934, which will apply not only to ships holding International Convention Certificates, but to certain other passenger steamships.

Regulation 3 of the Regulations respecting Fire Extinguishing Equipment requires that ships of Class A, when engaged on international voyages, shall be provided with an approved fire alarm or fire detecting system, which will automatically register at one or more points or stations in the ship, where it can be most quickly observed by officers and crew, the presence or indication of fire in any part of the ship which is, in the opinion of the Board, not accessible to a fire patrol system.

All spaces in a passenger ship, except such spaces as cargo spaces, baggage and store rooms, may, as a general rule, be regarded as accessible to the patrol, and the requirement of fitting an automatic fire alarm or fire-detecting system need only apply to such spaces, except in special cases where the Board may decide otherwise. The Board has decided—

(a) That the provisions of Regulation 3 shall only apply to ships required to have Safety Convention certificates, that is, ships making international voyages on the ocean;

(b) That in the case of such ships the Regulations shall not apply, for the present, to existing ships, that is, ships the keels of which were laid before the 1st day of July, 1931..."

Accordingly, if the definition of "international voyage" in the Statute is to be applied, Regulation 3 did not apply to the "Noronic" while engaged on the Great Lakes. If, on the other hand, that definition is not applicable, the Board ruled that ships on the Great Lakes were exempted from the provisions of Regulation 3. It is to be observed that even if the Regulation had been applicable to the "Noronic" the automatic fire alarm or fire detecting system called for by the Regulation, was not required to be capable of indicating the presence of fire in the passenger accommodation of the ship, such parts of the vessel being "accessible to a fire patrol system". The fire which occurred on September 17, 1949, began on "C" deck in passenger accommodation.

It might have been thought that as this vessel was plying in United States waters on the Great Lakes, and carrying passengers to and from United States ports, it would have been subject to the requirements of the United States regulations. As to being equipped with either a sprinkler system or an automatic fire detection and alarm system, the relevant regulation is 77.16 of the "General Rules and Regulations for Vessel Inspection", which reads as follows:

"77.16 Fire-Detecting, alarm, automatic, sprinkler and patrol systems; new and existing vessels. (a) (1) All passenger vessels with berth or stateroom accommodation for 50 or more passengers shall be fitted, unless deemed unnecessary by the Commandant for the proper protection of life, with an automatic water-sprinkling system of a type approved by the Commandant, which system shall be so installed as to protect all enclosed parts of the vessel accessible to passengers or crew while the vessel is being navigated, except cargo holds, machinery spaces, and when of fire-resisting construction, toilets, bathrooms, and spaces of similar construction.

Where, in the case of a particular vessel, the Commandant does not consider the installation of an automatic water-sprinkling system necessary such vessel shall be protected in such enclosed parts of the vessel as the Commandant shall deem necessary, with an automatic electric or pneumatic fire-detecting and alarm system, used singly or in combination, of a type approved by the Commandant."

However, pursuant to United States legislation, the provisions of the Canadian regulations were considered as "approximating those in the United States" and a certificate was issued on April 28, 1949, by the Marine Inspection Office of the United States Coastguard, admitting the "Noronic" "to the exemptions and benefits provided by the said section 4400 of the Revised Statutes relating to the inspection of boilers, machinery, hull and equipments". This meant that compliance with Canadian regulations was considered sufficient.

The "Noronic" was in fact equipped with a fire alarm system (not automatic) consisting of two quite independent parts. This system was mechanically in good order and the dry cell batteries by which it was operated had been renewed in 1949. In a number of places throughout the ship, alarm boxes of a common type were located, having in them a pane of glass which, when broken by a small hammer which hung beside the box, rang bells located in three separate places in the ship—in the officers' quarters, on the port side of "D" deck, and in the engine-room on "E" deck. At each of the first two of these points there was an indicator showing the particular box at which the alarm had been given.

In the pilot house forward above "A" deck, and there only, there was a manually operated switch which actuated a system of klaxon horns located at various points throughout the ship, by which crew and passengers could be

given warning of fire. According to the evidence of both the first and second officers, it was the duty of the officer on watch, upon hearing the bell alarm, to proceed to the locality from which the alarm had been given for the purpose of investigating whether the fire was serious enough to require the giving of the klaxon alarm and, if he so concluded, then to return to the pilot house above "A" deck where he would throw in the switch which sounded the klaxon horns. If the officer on duty was away from the pilot house, the wheelsman who should be there was expected to find the officer on duty and report to him as to the locality at which the alarm had been turned in. To obtain this information he would first have to go to the bath-room in the mates' quarters where the indicator was located. It is, of course, obvious from the above that considerable time might be lost between the giving of the alarm at the point where the fire was first discovered and the giving of the klaxon alarm which could only be sounded from the pilot house.

Fire Extinguishing Equipment—Fire Hydrants

Regulation (4) provides that every Class A ship —

"shall be provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously brought to bear upon any part of each deck or space occupied by passengers or crew, when the watertight and fire-resisting doors are closed."

Regulations (5) and (6) have similar provisions with respect to cargo spaces, coal bunker spaces, boiler rooms and engine rooms.

Regulation (12) requires every Class A ship to be provided with such number of fire hoses as the Board may deem sufficient. Subsection (2) provides that:

"Each of the hoses shall be of sufficient length to project a jet of water to any part of the space in which it is intended to be used."

No accurate plan or other specific information showing the number and locality of the fire hydrants with which the ship was fitted at the time of the fire was produced during the hearing. Since that time the owners have filed plans showing the plumbing installations throughout the ship. The employee of the owners who marked the plans which were used at the hearing had no first-hand knowledge as to the number or location of the fire hydrants and the plans now produced have not been cross examined upon.

The Government Inspector, who inspected the ship annually, and his superior, were of opinion that if two hydrants on a particular deck were not sufficiently close to a particular point to enable two separate hoses to be brought to bear on such locality, the regulation would be satisfied if it would be possible to bring a hose from the deck above or the deck beneath. In practice this had never been done at any fire drill and, in my opinion, such an operation should not have been relied on, if such be the fact, in satisfying the provision that two powerful jets should be capable of being "rapidly and simultaneously" brought to bear on any given point on "each deck". Such an interpretation of the regulation may possibly be negatived by implication by regulation 11 (2), which provides that the "hydrant shall be so placed on each deck that the fire hoses may be easily coupled to them".

It was also suggested that a length of hose could be taken from one hydrant and coupled to the hose attached to another hydrant on the same deck so as to reach a spot upon which the hose from a third hydrant could also be brought to bear. The length of hose attached to each hydrant was fifty feet. It may be that this would have been feasible, but the uncoupling and the coupling of the additional length of hose would take some time, a consideration which is of

prime importance. However, it is not possible in the present instance for lack of exact information as to the actual position of the hydrants to make a finding as to whether or not the regulations were observed. In any event, it does not appear that the failure to extinguish the fire at a stage when that would have been possible, was due to any deficiency in the number of location of hydrants.

Numbers of the hydrants on the "Noronic" had two outlets and two valves. Most of the hydrants had one outlet of two inches and another of one inch, the smaller outlet being for the coupling of hose generally used for washing the deck. While the two inch hoses were invariably coiled in a rack or reel adjacent to the hydrant, that was not so in the case of the smaller hose.

As to regulation 6, which deals with the provision for making available two powerful jets of water in the coal bunker spaces, boiler rooms and engine rooms, there was only one hydrant capable of supplying a single hose in the engine room and boiler rooms. The Inspector said in evidence that in that situation he could not say that regulation had been complied with, although the certificate which he issued to the owners states that the statute had been complied with. I do not think that what was later pointed out, namely, that there were also some small connections used to cool ashes altered this situation. Again, it should be said however, that non-compliance with this regulation did not prejudice the situation at the time of the fire.

Fire Extinguishers

Subsection (2) of Regulation (4) provides that:

"On each deck of every ship of Class A there shall be provided, in each enclosed space occupied by passengers or crew, approved portable fluid fire extinguishers so that there shall be at least one such extinguisher for every 50 feet of length, or part thereof, of such space, provided that if any such space is so subdivided or arranged that, in the opinion of a Steamship Inspector, the number of extinguishers hereinbefore specified would not be sufficient, he may require such additional number to be provided as he considers necessary in the circumstances."

By Regulation (7) it is provided that:

"Every ship of Class A, in which the main boilers are coal-fired, shall be provided with at least two approved portable fluid fire extinguishers in each of the boiler rooms and engine rooms."

As in the case of the hydrants, the plans filed attempted to show the location in various places throughout the ship of fire extinguishers, but it is not possible to say on the evidence that they are correct as to the fire extinguishers any more than in the case of the hydrants. There were, however, on board sufficient extinguishers in point of number to comply with the regulations and those used on the night of the fire were in operating condition.

The Steamship Inspector in his report of his inspection of the 23rd of April, 1949, said that the "Noronic" had 37 two and one-half gallon soda acid extinguishers, 10 one gallon pyrene extinguishers and 3 two and one-half gallon foamite extinguishers. He did not, however, see these extinguishers in position, either in the boiler rooms and engine rooms, or elsewhere in the ship. At the time of his inspection they were all collected together on one deck where they were being filled. The inspection consisted of lifting up each extinguishers for the purpose of seeing whether or not it had been charged and in turning two or three upside down to ascertain if they would operate. It was impossible for the Inspector therefore to say, from such an inspection, that the requirements of the regulation as to the provision of the necessary number of extinguishers

"in each enclosed space occupied by passengers or crew" on each deck, had been satisfied. Such an inspection does not attain the real purpose of the regulation, namely, that a sufficient number of fire-extinguishers ready for instant use shall be in position on each deck.

Pumps

Regulation 10 requires Class A ships to be provided with at least three fire pumps, operated by steam or other motive power, each to be capable of delivering such quantity of water as the Board may deem sufficient, in two powerful jets simultaneously in any part of the ship. Subsection 4 reads as follows:

"When more than two such pumps are required they shall not all be fitted in the same space".

The "Noronic", at the time of the fire, had complied with this regulation as to the number of pumps, but all three considered by the Inspector as complying with the regulation were in fact "fitted in the same space", contrary to the express provision of the regulation. The Inspector, in giving his evidence, expressed the view that it was better to have the pumps placed as they in fact were but that, of course, was not a matter for him. As will subsequently appear, the water supply to the fire hose ultimately failed. It cannot be said, however, on the evidence before me, that the location of the pumps in breach of the regulation was the cause of this failure.

Smoke Helmets and Safety Lamps

Regulation 13 required the "Noronic" to be provided with at least two approved equipments, each consisting of a breathing apparatus or smoke helmet and a safety lamp, to be "kept in widely separated places". These were on board at the time of the fire but at the time of the inspection they were on the deck with the fire extinguishers, so that the Inspector did not see them in place.

I venture to think that the laxity in the particulars mentioned above in requiring compliance with the regulations could only induce or encourage a similar laxity on the part of the owners and officers of the ship with respect to the vital matter or preparedness for fire.

Fire Detection Patrol

While the ruling of March 15th, 1938, already referred to, stated that it was the intention at an early date to make provision for fire patrol not only on International Convention ships, but on "certain other passenger steamships as well", there appear to be no regulations applying to passenger ships on the Great Lakes with respect to the maintenance of any fire patrol system or as to fire drills for either passengers or crew.

The "International Convention for the Safety of Life at Sea" (the First Schedule to The Safety of Life at Sea and Load Line Conventions Act, 1931, cap. 49), which contains provisions of this nature, dit not apply to ships engaged on voyages between Canada and the United States on any lakes or rivers; see section 2 of the statute.

However, in my opinion, it is implicit in the regulations requiring:

(a) that the ship be "provided with apparatus whereby at least two powerful jets of water can be rapidly and simultaneously brought to bear upon any part of each deck or space occupied by passengers or crew;" (Regn. 4 (1))

(b) that on "each deck... there shall be provided in each enclosed space occupied by passengers or crew, approved portable fire extinguishers;" (Regn. 4 (2))

(c) that "on every ship...the branch water-service pipes and hydrants shall be so placed on each deck that the fire hoses may be easily

coupled to them;" (Regn. 11 (2)) and

(d) that "all equipment, apparatus or appliances provided in accordance with these Regulations shall be in working order and available for immediate use before the ship leaves port, and at all times during the voyage;" (Regn. 36)

that there shall also be provided by the shipowner men trained to use the required apparatus and so organized that the presence of fire on shipboard may be learned at a sufficiently early stage as to make the use of the required apparatus in the hands of such men effective in its control. Section 402 of the Canada Shipping Act, 1934, provides that:

"Every steamship registered in Canada shall be manned with a crew sufficient and efficient from the point of safety of life for the purpose of her intended voyage, and shall, during such voyage, be kept so manned."

So far as patrol for the detection of the outbreak of fire is concerned, that is a duty which, it was decided as long ago as 1910 in The Dominion Fish Company v. Isbester, 43 Canadian Supreme Court Reports, 637, is incumbent upon the shipowner for the protection of sleeping passengers in the case of a ship lying at dock.

In a ship equipped with neither automatic apparatus for detecting the outbreak of fire on board nor an automatic sprinkler system to extinguish it if it did break out, as was the case with the "Noronic", an efficient patrol for the detection of fire at the earliest possible moment would appear to be essential.

The fire patrol actually employed on the ship was as follows:

There were two members of the crew called "Special Officers", whose duty it was to perform this function. Each was on duty for six hours when he was relieved by the other. This officer on his rounds carried a time clock and at various points about the ship there were keys located, his duty being to go to these points and punch the clock with these keys "on the hour". On the 18th of June, 1942, the Company had issued instructions in writing to the Special Officers which read, in part, as follows: (The errors are in the original.)

"DUTIES OF SPECIAL OFFICERS

In general, the Special Officers represent the Investigation, Insurance (watching for fires, noting accidents to passengers, suggestion to prevent accidents, etc.,) and deportment of crew. He comes in contact with all department of the steamer and is directly under the Master, and in his duties to assist the Steward and Purser.

In later years some of his duties have been forgotten and others neglected. For this reason, many of his duties are outlined below.

WATCH DURING EVENING AND EARLY MORNING

2. Each night from 9.00 P.M. until 6 A.M. the watchman clock shall be punched punctually on the hour. (The dials are carefully checked by the Purser and the reason for not punching or the dials not being marked must be explained satisfactorily by the officer.)

During the round of punching, it is your duty to stop any excessive noise by passengers that are boisterous; this is especially so after mid-

night.

Upon completion of your round and all passengers are quiet, return to the rotunda where you are easily found should you be needed . . .

WATCH DURING THE MORNING AND AFTERNOON IN DAYTIME

Day Watch In Port 4. Your position while in port is at the gangplank and you are not to leave it without asking someone to stay until you return, should you find it necessary to leave."

The tour of the time clock key positions took approximately fifteen minutes. after which the Special Officer made no systematic inspection but used his discretion as to where he might go. According to the above instructions his duty was to return to the rotunda. In addition to watching for fire, he was to keep an eve out for any unruliness on board and to quiet it down if possible. According to one of these officers, Brown, he was expected, when the ship was in port, to return to the gangplank after making his tour. The weight of evidence is that this was in fact the understanding. The other Special Officer, McPhaden, said that when the ship was in port it was his understanding that the Special Officer did not make these rounds but remained throughout at the gangplank and he referred to paragraph 4 above. This paragraph however, does not support this view as it expressly relates to daytime, but as will appear subsequently, McPhaden went off duty shortly after the ship docked in Toronto and was not on hand to awaken Brown for his watch commencing at 12.30 a.m., the morning of the fire, although Brown went to sleep about 11.00 p.m. expecting to be called by McPhaden around midnight. Even had this not occurred, it is plain that under the practice in vogue on the ship, there was no fire patrol at all in the early hours of the morning while the ship was in port for approximately forty-five minutes out of every hour.

On the night in question, the patrol at or about midnight was made, in the absence ashore of McPhaden, by one of the wheelsmen and the patrol at 1.00 a.m. was made, in the absence of Brown, by another wheelsman, Donaldson, who, along with Pepper, also a wheelsman, made the round on that occasion. Their method of making this round, as to which Donaldson said they had been instructed by Brown, consisted in going from the passenger gangway on "E" deck to the stern of the ship, up through the aft part of the ship to the top of "A" deck, forward on "A" deck to the bow, down through the bow portions of the ship and back to the place of commencement, punching the time clock at the stations, as they went. The nature and effectiveness of this patrol is illustrated by the evidence of Donaldson, who testified as follows:

- "Q. Can you tell us how long it took to do that?
 - A. I think it was about fifteen minutes.
 - Q. And is it correct to say that you went directly by the shortest route from one clock to the next?
 - A. Yes sir.
 - Q. And the shortest route being to go up from the lower deck to a higher one in the rear end, and puch the rear clocks first and then come down by the shortest route punching the clocks in the forward part of the ship?
 - A. Yes sir.
 - Q. Did you walk or did you run?
 - A. Walked."

On the card which hung in the passenger staterooms, the following appears:

"FIRE: This steamer is equipped with modern fire prevention apparatus, in addition to which the steamer is patrolled day and night by experienced watchmen for the protection of the passengers. In case of fire promptly notify any member of the crew."

In my opinion the sense of security which would be awakened in the mind of any passenger by the reading of this paragraph would not be justified by the

actual watch kept on board. As to the ship being equipped with "modern fire prevention apparatus", there was no automatic fire detection system nor a sprinkler system. These, of course, had been well known for many years.

It appears that the chief steward was nervous about fire. He said that he had instructed the bellboys, after the conclusion of their night cleaning, to patrol the ship and immediately to report to him, personally, any fire they might discover. There were either four or five bellboys on duty at night. One was required to remain outside the steward's office on the port side of "D" deck to answer bells from passengers which registered at that point, while the others went, at midnight, to the dance hall in the forward part of "B" deck to clean up after the dancing, which concluded at that time. Thereafter they had to use carpet sweepers on "A", "C" and "D" decks, each being assigned to one-half of these decks. It is therefore apparent that even if this could be described as a system of fire patrol, it could not operate until after these duties had been performed, which at times took, according to the evidence of the head bellboy, sometimes until 5.00 a.m. On the night of the fire the bellboys were still at work in the dance hall when the fire was reported.

In weighing the value of this bellboy patrol, from the standpoint of fire detection, it is significant that the head bellboy, whose attention was first called to the presence of smoke in the ship on the night of the fire, went to the steward's office to get the key for the linen locker from which the smoke was emanating, without at all reporting the fire to the chief steward, although the latter's room was right beside the office where the key was hanging. Neither the captain nor the first officer appears to have had any knowledge of this arrangement of the steward.

Fire and Lifeboat Drills

The "Noronic" had a fire drill and a lifeboat drill for the crew. The usual practice was to have these drills every Tuesday at about 10.00 a.m. when the ship was ordinarily moored at dock in Duluth, and the drills immediately followed one another.

The fire hydrants constituted the "fire stations", each having a number, and on the signal for fire drill being given, each member of the crew who had been assigned to a fire station was expected to go there. There were some 52 (sometimes 53 is mentioned in the evidence) fire hydrants, and two, and in somes cases three, members of the crew were assigned to each. This assignment did not exhaust the complete number of the crew, apart from officers.

With respect to those assigned to hydrants, the drill consisted simply in each man getting to his particular station in the shortest possible time, the hose being taken down from its rack or reel. In the case of hydrants outside the cabin structure of the ship, the hoses were frequently discharged overboard. This, however, was never done in the case of inside hydrants. Each hydrant crew was expected to remain at his station until ordered to go elsewhere. Some of the fire extinguishers were discharged on three or four occasions during the season. Apart from the above, and instruction to some members of the crew as to how to operate the extinguishers, the crew had no training with respect to fire.

The above fire drill was invariably followed immediately by lifeboat drill, when, following the signal, the crew assembled in groups of approximately six at fourteen lifeboats on "A" deck and at two on the hurricane deck above. Passengers were expected to be loaded into the boats from numbered stations on "C" deck, the numbers of these stations appearing on the cards hung in the staterooms. The sixteen lifeboats would account for only 96 of the crew and the evidence does not establish what duties, if any, the remainder of the crew, apart

from the officers, had on these occasions. At these drills the lifeboats on the side of the ship away from the dock were lowered into the water. This could not be done in the case of those on the side next to the dock.

Any element of surprise in these routine fire and boat drills was of course lacking. They were expected each Tuesday and the full crew was kept on hand and was not allowed to go on shore until after the drills were over. The situation when the ship was in dock at Toronto, at night, when all the crew but those actually on duty were free to go on shore was, of course, quite a different situation.

In 1945, The Canada Steamship Lines circulated a bulletin, (Bulletin 13) to the Masters of all its passenger steamers. The first page reads as follows:

"CANADA STEAMSHIP LINES LIMITED

Montreal, April 16th, 1945.

BULLETIN No. 13.

TO MASTER OF ALL PASSENGER STEAMERS

FIRE AND LIFEBOAT DRILL—SEASON 1945

I enclose herewith a copy of Lifeboat and Fire Drill regulations which will require special and preferred attention throughout the entire season. Please study same carefully and when thoroughly conversant with what is required, immediately instruct all concerned on board your steamer accordingly.

This is serious business and you must make certain without delay that all fire and lifeboat drills are performed with highest possible efficiency.

You are aware that ALL boats must be FREQUENTLY lowered throughout the entire season. It is also necessary that all boats be placed in water as often as possible and that their crews be given numerous opportunities for rowing practice.

Fire and Lifeboat drills should be held weekly during the navigating season, but much more often during the first few weeks of this season's operations, in order that all new members of your crew may become entirely familiar with their stations and drill duties, and wholly efficient in both drills, at the earliest possible date.

Smart handling of equipment and efficient performance of these drills is an important duty incumbent upon your position and that of your officers, and it is imperative that your crew without delay, gain a very full appreciation of the importance of these drills. Various crew members should be interrogated frequently throughout the season concerning their number and station in the event of danger signal being sounded.

Masters will please arrange pressure tests of all hose, at least twice a month, and record their findings on Fire and Lifeboat Drill reports which are to be very carefully prepared and mailed promptly following each drill.

The Department of Transport are showing a keen interest in fire and life-boat equipment and practices and I understand it is their intention to keep abreast of the efficiency with which crews of all steamers take care of these requirements. The writer, also, will make a point of seeing some of these drills performed and trusts that none of them will be found disappointing or lacking in any detail.

Please acknowledge receipt of this communication.

'N. J. Reoch'

Operating Manager."

NJR/JH Enc. On the following page it was stated that:

"Effective with the opening of Navigation 1945, the following rules and regulations governing lifeboat and fire drills will be carried out on all passenger steamers of this Company's Fleet. These rules and regulations contemplate that lifeboat and fire drills shall be conducted as though an emergency existed and Masters, must therefore, exert every effort to see that their officers and crew become proficient in this most important work."

As already mentioned, the actual drills were routine affairs. It is difficult to see how, therefore, any conditions of an emergency could be produced.

The next paragraph reads:

"MUSTER STATIONS

The Master of every steamer will designate the locations of muster stations throughout the steamer to which members of the crew will report for lifeboat and fire drills. The Master must make certain that each member of the crew is thoroughly conversant with the location of his muster station and with the signals calling the crew to such stations."

So far as signals are concerned, the actual signal used in practice for the fire drill was a continuous sounding of the klaxon horns, already referred to, while the signal used for lifeboat drill was one long, three short and one long blasts on the main steam whistle of the ship.

On the other hand, each member of the crew in signing on was given a blue card on which appeared his number as a member of the crew, the number of the fire hydrant which constituted his fire station and the number of his boat. This card, which had been used for years without change, contains the following:

"GENERAL OR FIRE ALARM: One long, three short, one long blast, main steam whistle or pushes on electric alarm button. On hearing either of the above alarms, the crew will immediately go to their Fire Drill assignments.

MAN BOATS: General Alarm followed by Two Short, Sharp Blasts on Main Steam Whistle or pushes on Electric Alarm Button. On hearing this alarm, crew will immediately go to Boat Drill assignment."

It will therefore be seen that the signal in practice used for lifeboat drills was the signal which the crew members were told on the card was a fire alarm signal and the fire alarm signal actually used in fire drills does not appear on the card at all. The crew were left to learn by experience that the information on their cards with respect to these signals was to be disregarded.

In each passenger cabin there was hung the card, already referred to, giving the lifeboat station to which the occupants were expected to repair in case of need. The provision as to alarm signals on this card was in accord with those actually used in the drills. The passengers, in common with what I am given to understand is the practice on lake boats generally, did not take part in either fire or lifeboat drills. They were not informed, apart from what they might read on the card, as to what they should do in the event of fire. The importance of a well trained crew was therefore, if anything, enhanced by this circumstance.

Bulletin 13 continues:

"MUSTER LISTS

It shall be the duty of the Master of every steamer to cause muster lists to be prepared covering every member of the crew prior to the commencement of operations. Muster lists shall be approved and signed by the Master and shall be posted in conspicuous places in several parts of the steamer, including the Crew's Quarters and in the room of every officer. They shall contain full particulars of the signals required by these regulations for calling the members of the crew to muster stations."

There was nothing at all in the way of "Muster Lists" signed by the Master and no muster lists were posted in the room of any officer. According to the evidence of the first officer, a chart was hung in three places in the ship; one forward on "D" deck in the maid's quarters, one on the crew's stairway aft, on either "B" or "C" decks, and one in the crew's recreation room aft on "A" deck.

From this chart, which had been on the ship for some years, and was there when Wood joined the ship in 1944, he prepared a typed list, kept one copy and gave one to the chief steward. From this list the numbers on the blue cards given to the crew, together with the numbers of their fire and boat stations, were filled in. Captain Taylor had apparently no knowledge of the chart and his familiarity with the typed list was limited to such knowledge as he gained by "looking over the shoulder" of the first officer as he was engaged in filling in the cards of the crew with the numbers shown on the list.

According to Wood the typed list, the information for which was obtained from the chart, contained each crewman's number, the number of his fire station and the number of his boat station. Wood said that a somewhat similar list had been prepared in 1948 by the then second officer. It is exhibit 65. The actual lists of 1949 were apparently destroyed by fire, but since the hearing, one of the charts was located and put in by the owners. It was located affixed to a bulkhead in the engine room.

Wood is mistaken as to the source of the information for the typed list so far as fire stations are concerned, as the chart, which counsel for the steamship company says is one of those to which Wood referred in his evidence, shows no fire stations at all.

Apart from the typed lists of Wood and the chief steward, whatever may have been on them, there was nothing else which could be called "muster lists". The only thing which the chief engineer had was a memorandum book in which he had entered the stations of the engine room crew.

Bulletin 13 continues:

"MUSTER CARDS

A card indicating the muster station for each member of the crew must be placed in his berth in such position that it cannot be obscured by baggage or clothing."

The only card issued in compliance with this regulation was the blue card already referred to which each member of the crew received when signing on. The evidence shows that the crew kept these where they wished. Some were kept in the berths—others were kept on the person. More than one of the officers stated that the latter was the place where the crew members were expected to keep their cards.

The Bulletin also contained a provision requiring each member of the crew to be furnished with a button showing the number of his muster station. Owing to the frequent changes of personnel on the "Noronic" however, this provision was dispensed with following a conversation between the Master and the Operating Manager of the owner in 1945.

The Bulletin also contained this paragraph:

"Both The Master shall allocate Senior Officers to certain locations throughout Lifeboat the ship so that they may become familiar with muster stations allotted and Fire to passengers in groups of state-rooms on each deck. This will permit Drill of passengers being directed to their proper muster stations should the occasion arise."

Captain Taylor testified that the senior officers on his ship were the first officer, second mate, third mate, chief engineer, second engineer, third engineer, fourth engineer, purser and steward. He said also that the first officer was allocated to "C" deck, the second officer to "A" deck, the third officer to "B" deck, the chief steward and the purser to "D" deck.

According to the 1948 list, exhibit 65, Wood's post as "I-C free", i.e. that he did not have any particular deck but was in command and could go anywhere. Wood's evidence on this point is contradictory. He said:

- "Q. But first I want as to the allocations and the question was, was there any allocation that you know of of senior officers allocated to certain locations for the purpose of mustering passengers—now just the fact of allocation first?
 - A. No there was not.
- Q. Did you make any allocation?
- A. No, sir.
- Q. Did anyone else to your knowledge?
- A. Not that I know of.
- Q. Now I want to be fair with you. I thought the Captain did say to us that he had allocated certain senior officers in accordance with this and he said the allocation was the chief officer to "C" deck—the 2nd Mate to "A" deck—the 3rd Mate to "B" deck and the chief steward and purser to "D" deck—do you know anything about that?
- A. Well yes, I would be in charge of "C" deck.
- Q. Well that is what he told us, that you were in charge of "C" deck—then must that not mean that you were allocated in some way to "C" deck?
- A. Yes, I would be allocated.
- Q. How would you be allocated and what instructions did you have with regard to "C" deck?
- A. I think by this chart.
- Q. Now you mean by the chart that was posted up on the wall?
- A. Yes.
- Q. Now if that chart were in the form of Exhibit 52, (which related to another steamer, the "Kingston") "What relation had it to the mustering of passengers because it refers to boat stations and raft stations—how would that allocate you to "C" deck?
- A. Well the same as the stewards or assistant stewards on "D" deck on this chart.
- Q. Then if that is an allocation to "C" deck, I should find that same allocation on Exhibit 65, should I not, unless you changed it?
- A. No, I never changed it. I was free to go anywhere.

- Q. That is what I thought Exhibit 65 showed—Exhibit 65 under the name of 'Wood', has 'First Officer, I.C. Free', and 'I.C.' means what— In Command?
- A. In Command.
- Q. 'In Command, free' so that, according to Exhibit 65, you would not have any particular deck at all?
- A. No, I could go anywhere—wherever I thought was best.
- Q. Now what do you say as to whether or not any station was allocated to you as the First Officer and as the senior officer, under this regulation?
- A. Well he may have told me to go to my allocation on "C" deck.
- Q. Well he may and then I suppose he may not, but I am trying to get from you whether he did or not?
- A. Well I have been there a number of years.
- Q. Then is your statement to me that you do not know whether the Captain in the case of fire had told you that you were to go to "C" deck?
- A. I am pretty sure—I might say that the Captain did not tell me this year. He could have back in 1944 or 1945.
- Q. Did you always go to "C" deck on the fire drill?
- A. No, I go all over the ship.
- Q. Then you were really not allocated to "C" deck?
- A. No, I was free to go anywhere.
- Q. I say you were not allocated then to "C" deck?
- A. Not to stay there.
- O. Well was anybody allocated to "C" deck?
- A. Well I think the officers were free—wherever we could be the most help.
- Q. Then no one was allocated to any particular place?
- A. Unless the Captain has told me in the earlier years.
- Q. At some particular earlier time?
- A. Ves.
- Q. Then when the Captain comes along and tells us that the senior officers were allocated to particular decks he just was mistaken?
- A. Well, I do not like to go against the Captain's evidence but—
- Q. All you can say is just what you have told me now—it was your understanding?
- A. I think in cases of emergency, the Officer goes where he can be the best help."

On referring to the chart now produced it reads as follows:

"CANADA STEAMSHIP LINES LIMITED NORTHERN DIVISION

FIRE STATIONS

Fire Alarm Signal—LONG BLAST OF ELECTRIC HORN

At the sounding of the fire alarm signal, all members of the crew will promptly proceed to their respective stations, stretch hose and immediately prepare fire fighting equipment for instant use."

Then follows a table covering three steamships, the "Noronic", "Hamonic" and "Huronic". The "Hamonic" was destroyed in 1945 and the "Huronic" has not been in passenger service for some years. That part of the table which relates to the "Noronic" is as follows:

NORONIC
First Officer in Charge Assisted by Quartermasters — Lookouts — Bell Boys
Chief Steward in Charge Assisted by Dining Room and Kitchen Crews
Assistant Steward in Charge Assisted by Bell Boys and Porters
Purser in Charge Assisted by Bell Boys and Porters
Watchman in Charge Assisted by Engine Room Crew and Sailors''

Wood's confusion on this point is, in my opinion, merely illustrative of the state of the organization on the ship, or lack of it, to deal with an actual fire.

When tested by the evidence as to whether the chart had any applicability to the "Noronic" in 1949, it appears to have had none. According to Wood, he was either in charge of "C" deck or was free to go anywhere. According to the chart he was in charge of "A" deck. According to Wood and the Captain, the second officer, Bowles, was allocated to "A" deck. According to Exhibit 65 he was to be "(a) scene", while the chart does not put him in charge anywhere. Similarly, according to the Captain and Wood, the third mate was allocated to "B" deck. On Exhibit 65 he is "(a) scene" but he is not shown on the chart at all. Again, according to the Captain and Wood, the chief steward and purser were allocated to "D" deck. Exhibit 65 says the chief steward is "Cabin I/C" while the chart shows him in charge of "B" deck and the purser on "D". According to the chief steward himself, he had "two decks to take care of". Again the chart says that the chief steward on "B" deck will be assited by the dining-room and kitchen crews. The only member of either of these crews who gave evidence said his fire station was on "C" deck.

I think these references are enough to show that while the chart had hung in the ship "for years" it had become completely obsolete by 1949 and had no reference to any organization then existing. It was so completely obsolete that Captain Taylor, when shown a similar chart from the steamer "Kingston" said there was no such card on board the "Noronic."

To return again to Bulletin 13, it contains the following:

"Special duties to be allotted to members of the crew

Special duties shall be allotted to each member of the crew in accordance with the details of such special duties shown on the muster lists, and such duties shall be, as far as possible, comparable to that of the individual during the regular work of the steamer. Such special duties provided by the muster list shall include:

Fire

Drill The methods to be used in the extinction of fire—

- 1. The operation of hand pumps and fire pumps from a sufficient number of outlets and for such length of time so as to ensure that the equipment is in order and effectual.
- 2. The practical use of fire extinguishers; a number of these should be discharged at each drill.
- 3. The closing of all fire resisting bulkhead doors and other openings which could be used to isolate fire as much as possible.
- 4. The method of wearing and using the smoke helmets with which each steamer is equipped".

There were no hand pumps or fire-resisting bulkheads on the "Noronic", so numbers 1 and 3 did not apply. As to number 2, Captain Taylor testified:

- "Q. Was that done?
 - A. Not at each drill—we would not dump them on the ship or we would have had a mess that we could not clean up in time to go out.
- Q. Well why was it not done—just because of the mess that you speak of?
- A. Because of the mess.
- Q. I do not quite understand that answer—was it done at any drill?
- A. I did not see it.
- Q. Were you aware that it was not being done at drills?
- A. I did not give it a thought I guess."

On the same subject Wood said:

- "Q. ... now that was not done was it?
 - A. I have discharged one on a drill.
 - Q. Have you discharged one at each drill?
 - A. No not at each drill.
 - Q. Now listen to my question and my question was whether in fact a number of these were discharged at each drill . . . now the answer 'yes' or 'no' or you do not know?
 - A. No.
 - Q. Then it was not?
 - A. No.
 - Q. Then you are not able to tell us of any occasion when fire extinguishers were discharged?
 - A. I cannot say to the date or the week or when.
 - Q. I would have the wheelsman. I would just go in and say 'Take a fire extinguisher and we will try it'.
 - Q. And I take it you cannot tell us how frequently that was done?
 - A. I would say three or four times this season."

There were in fact no special duties in connection with the methods to be used in fighting fire allotted to the members of the crew. Wood says:

- "Q. Now can you tell me as to any member of the crew to whom any special duty was allotted in case of fire, other than the general instruction to go to your station, lay out the hose and await orders?
 - A. That is right.
 - Q. Is that the extent of the allocation of special duties in the case of fire?
 - A. Yes.

Both the captain and the first officer displayed ignorance of even the scheme of organization for the fire drills and contradicted each other. First as to Wood, he said:

- "Q. . . . if you give the fire signal either by the klaxon or by the whistle, how many fire stations were manned?
 - A. At each drill?
 - Q. Yes, at every drill.
 - A. They all would be manned.
 - Q. And how many?
 - A. Fifty-two.
 - Q. Fifty-two, and how many of the crew at each?
 - A. I think two to a hydrant.
- Q. Fifty-two hydrants would be 104. What about the rest of the crew in case of a fire or fire drill, the other 66, were they supposed to go anywhere?
- A. They would be free.
- Q. Then they were not supposed to go anywhere?
- A. I could be wrong on that.
- Q. You don't know.
- A. I really am not sure without checking it.
- Q. And where would you check?
- A. On the chart."

Taylor:

- "Q. I am talking about fire stations?
- A. There would be three on the same fire station.
- Q. But there are only 53 hydrants altogether.
- A. Yes sir.
- Q. That makes 159.
- A. Yes, sir.
- Q. What about the rest of the crew?
- A. They would be on the fire extinguishers and guidance of passengers through the corridors."

This last answer is pure improvisation. There is nothing in the evidence to support it.

In my opinion the ignorance of both these officers of their organization for dealing with fire and the disregard of even such instructions as they had from the owners is symptomatic of the low importance given to the possibility of fire on board the ship. I think it is very plain that it was not at all considered "serious business" as Bulletin 13 said it should be.

There was some vague evidence given by the Captain as to his consideration of the possibility of fire occurring while the ship was at a dock. The naivety of thought displayed is well illustrated by the following from his evidence:

- "Q. . . . Apart from that muster list (Wood's typewritten sheet) were there any instructions issued by you as Master of the ship as to what was to be done by anybody in case of fire occurring when the ship was at the dock?
 - A. I spoke to the officers and heads of departments that if the ship were ever afire at dock the best thing to do was to get everyone ashore as fast as possible."

Wood's evidence is:

- "Q.... You have a ship with over 500 passengers on it in port and I am asking you whether anyone considered what watch would be necessary to protect those passengers through the night. Was that question considered to your knowledge?
 - A. No.
- Q. No discussion of it, I take it, between you and the Captain?
- A. Not that I know of.
- Q. And no instructions either to you or by you as to any extra precautions to be taken other than the watch that was ordinarily kept?
- A. That is right sir."

The draughtsman of Bulletin 13 does not himself appear to have had at all in mind the difference in the situation which would present itself in the case of a fire while the ship was in dock as distinguished from one at sea. The bulletin contemplates only that passengers would be directed to their muster stations which were on "C" deck. These would no doubt be the proper places if they were to get off the ship by means of the boats, but they might be totally inappropriate when the proper thing to do was, as the event proved, for the passengers to get down to "E" deck where alone there was a gangway to the dock. Such a situation does not seem to have had any consideration in any way from either the owners or the ship's officers and I do not accept the evidence of Captain Reoch, the general manager of the owners who drafted Bulletin 13, that he had in mind in the draughting a situation such as eventuated at the dock in Toronto. In my opinion the bulletin on its face refutes any such suggestion as it expressly provides for directing passengers to their "proper muster stations" which were on "C" deck. There is no other provision in the bulletin on this subject. To do any such thing in the circumstances present on the occasion of the fire under consideration would, of course, have served no purpose whatever and would have occasioned the loss of invaluable time and might have condemned many to death. In the end, Captain Reoch was obliged to recede from his original position. I quote from his evidence:

- "Q. Let me ask you this, if I may follow that up—was it your intention under these rules when you drew them up, that in the event of a fire at a dock, the passengers from "D" deck would go up or be directed up to "C" deck, and then go from "C" deck back down to "D" deck, to get off on to the dock?
 - A. That is quite possible. If I were—
- Q. Now just a minute, you see you are not answering the question which you are asked, Captain Reoch, and I wish you would save our time by just answering the questions put to you. Would you read that question, Mr. Reporter?

(Reporter Reading)

- "Q. Let me ask you this, if I may follow that up—was it your intention under these rules when you drew them up, that in the event of a fire at a dock, the passengers from "D" deck would go up or be directed up to "C" deck, and then go from "C" deck back down to "D" deck, to get off on to the dock?
 - Q. Now that is the question.
 - A. Yes, that is correct in this particular case in Toronto.
 - Q. Now I am not asking about any particular case in Toronto, I am asking about these rules.
 - A. Yes.
 - Q. And that was the intention when you drew them up?
 - A. Yes, for this reason—
 - Q. Now just a minute—that was the intention?
 - A. Absolutely.
 - Q. And you visualized a situation which I have just put to you, did you?
 - A. Yes.
 - Q. Now you want to make some explanation?
 - A. Yes, I do Mr. Commissioner, for this reason that Toronto—at Toronto the passengers left the vessel by "E" deck—that is not a regulation of the system at other docks. For instance at Port Arthur where we run in regularly and Duluth.
 - Q. But if I understand you correctly though—notwithstanding what the practice is at Port Arthur, you did conceive of a situation such as I put to you a minute or so ago?
 - A. That is right.
 - Q. Then do you mean, Captain Reoch, that these regulations which you had issued were ones designed to be applicable where the egress from the ship would be from a different deck than existed in this case?
 - A. That is right.
 - Q. Then I take it you did not make any regulation for egress from the ship where the passengers would come off "E" deck as was the case here, but left that entirely to the Master?
 - A. That is general practice.
 - Q. Now that is not an answer you see.
 - Q. Is that what you did, or not?
 - Q. You are asked what you did?
 - A. It is quite plain, Mr. Commissioner, that these rules were drafted up to cover the general picture and the officers in charge of the ship are expected to act in a case of emergency.
 - Q. Then I will follow that up with one other question—then these rules were not drafted to cover what would be done on the "Noronic" when she was in port in Toronto, in the event of a fire?
 - A. I disagree with you there. These rules were drafted to the best of our ability to cover all emergencies. The officers are allocated to all decks to assist passengers in leaving the ship.
 - Q. Captain Reoch, you have told us that you did not intend, in the case of the "Noronic", that passengers would go from "D" deck up to "C" deck, have you not?
 - A. Well I would assume that they would not.

- Q. And you did not intend that they should, under these regulations?
- A. I would not think that they would."

Even Captain Taylor admitted the complete inapplicability of the bulletin to a fire at dock. He said:

- "Q. Are these regulations which we have been looking at, this muster-roll, intended to apply to such a case? I am speaking now of the distinction between a fire taking place at sea, if I may call it 'at sea' on the Lake, and a fire taking place when a boat is tied up at the dock, say in Toronto. Were these muster stations and the regulations as to that supposed to be followed?
 - A. I do not think that you can follow the same regulations."

In my opinion no one in a responsible position in connection with the ship, either on the ship or ashore, had applied his mind in any serious way to the handling of a situation such as arose on the outbreak of fire on the night in question, although such an eventuality cannot be considered otherwise than one which might occur at any time. Moreover complete complacency had descended upon both the ship's officers and the management. As already noted, Captain Taylor was at times extremely naive in his evidence. The following answer is revealing and, from my observation of the witness throughout, this evidence represents his real attitude on the possibility of fire occurring, namely, that he did not really think it would occur. He said:

- "Q. If you had formed the opinion that it would have been better to have 30 or 50 men on board the ship that night, you could have kept them there?
- A. If I had thought that there was going to be a fire I certainly would have."

The state of mind of the owners is equally well shown by the following evidence given by Captain Reoch:

- "Q: Then, you expected, I take it, that there would be no others on watch or on protecting passengers on this night in question than the ones whom I have mentioned. Is that right?
 - A. That is the standard practice, yes.
 - Q. That is what you expected?
 - A. Yes.
 - Q. And that is what you considered sufficient?
 - A. Yes, it is the same on any ship."

"Q. Now then, is there any reason that you know of why the Captain or the first mate or officers on this occasion could not have detailed a larger or more effective watch than was detailed on the night in question?

A. If there had of been any signs of an emergency, yes, but there was no reason why they would have. I can't see any reason why they would."

"Q. Well, suppose you were in his (the Captain's) place and wanted a more efficient watch, who would you call on?

A. You are asking me now what I would do if I were Master of that ship, Mr. Pickup?

- O. Yes.
- A. If I were Master of that ship, and knowing that the same watch were on duty as we would have had on the lake or at sea and no indications of a hurricane or no indications that we may be vacating our berth during the evening to make place for some other ship, I would be satisfied in my own mind that we had a sufficient crew on that vessel, if I were Master of the ship, because that ship has been running from 1913 without mishap.
- O. That means, if you had been Master, you wouldn't have put on any more watch than the Master did on this occasion?
- A. No. I wouldn't.
- O. And it follows that the watch which the Master kept on that occasion was the watch which he was expected to keep by the company?
- A. That is the watch the Master normally kept and the watch which the company assumed he would keep.
- O. And the watch that the company expected him to keep on this occasion in this port of Toronto with 550 passengers aboard?
- A. That is correct."

The fire which actually occurred, therefore, found officers and crew without any organization designed to deal with such a situation.

Bulletin 13, as I have said, was sent out for the first time in 1945. The same document, without change, was sent out annually at the beginning of each season thereafter down to and including 1949, although the company knew it was not being followed. Captain Taylor in fact paid little, if any, attention to it after 1945, although he said he read it during the summer of 1949. First Officer Wood had never seen it at any time and did not know of its existence.

While the ship was at sea most of the nights when she had passengers on board, it cannot be said that the situation in Toronto on the night of September 16-17 was so unprecedented that any special foresight was required to prepare for it. In a statement prepared by the shipowners, it appears that in 1946, 1947, and 1948 there were similar occasions. The evidence shows other occasions also in earlier years.

CREW ON DUTY AT TIME OF FIRE

Apart from the special officers, the hours of duty "on watch" were four hours, followed by eight hours off duty. The period of watch at the time of the fire commenced at 12:00 midnight, when there were fifteen members of the crew on duty. These were made up of:

- the "forward" or "deck" watch, Second Officer, Bowles 2 Wheelsmen. 1 Watchman. 4
- the "engine room watch", (b) Third Engineer, Randall, 1 Oiler, 1 Water Tender, 4 Firemen.
- (c) the Steward's department: 4 Bellboys.

Total 15

4

Apart from the special officers, the hours of duty "on watch" were four hours, the night of the fire, this was the same number on duty whether the ship were at sea or in port with or without passengers on board.

In theory, either the officer in charge or a wheelsman would be found at all times in or about the wheel-house above "A" deck in order that should the fire alarm bell ring when the glass in one of the fire stations was broken, there would be someone in the vicinity of the wheel-house to hear. The other wheelsman, while the vessel was in port, was expected to be on duty at the gangplank and each wheelsman served, during the four hour watch, two hours at the gangplank and two in or about the wheel-house. As a matter of fact, when the second officer went down to the gangplank about 12:30 a.m. on the night of the fire both wheelsmen were at the gangplank and the pilot-house was not manned by anyone for three-quarters of an hour.

The functions of the special officers and the bellboys have already been described. The "watchman" did not perform any duty which took him beyond the forward end of "D" deck, his duties, consisting of cleaning up "E" deck and sounding the ballast tanks. The duties of the engine room crew were confined to the engine and boiler rooms on "E" deck and below.

In port, all members of the crew, apart from the fifteen on watch, being free to go ashore and remain there until their next turn for duty came, there was no means of knowing what members of the crew, apart from those on duty, were on board when the ship was in port. The first officer, Wood, testified on this point:

- "Q. Then is there any way of knowing whether a person—an officer or a member of the crew, who is not on duty, is on the ship when the ship is in port—aside of course from somebody seeing him or by asking them whether they were aboard or not—is there any other way of knowing that?
- A. It is pretty hard to ckeck who is aboard without you check pretty nearly everyone you meet.
- Q. And that is exactly what I am trying to get at. If we are trying now to find out who were aboard the "Noronic" on the night of this fire—that is as to those who were not on watch—there is no way of finding out if they were aboard, except from asking someone who happened to see them aboard ship or getting that member of the crew himself and asking him whether he was, is that correct?
- A. That is correct."

As there were fifty-two fire stations on the ship, it is plain that during the night in question, when the ship was in port, any organization which might have existed for the manning of these fire stations while the ship was at sea, was non-existent. This was the situation which Captain Taylor, when he went ashore between 9:00 and 10:00 on the evening in question, left behind him, the number of passengers occupying the ship being as follows:

On	"A"	deck	94
On	"C"	deck	149
On	"D"	deck	281
		Total	524

While the evidence does not show the exact situation, it would seem that by far the greater part of these passengers were on board, many sleeping in their cabins, at the time of the outbreak of fire.

ORIGIN OF THE FIRE ON THE NORONIC

The evidence establishes that the fire originated in a small room located just forward of the women's wash-room opening onto the port corridor of "C" deck, just aft of the aft stairway leading down to "D" deck. In this port linen locker, towels and bed linen were kept, as well as soap and brushes which the maids used in cleaning. There was also a switch box which controlled the lights in some of the staterooms and, according to the evidence of the witness Brown, in this room, in common with others of the same type on the ship, there was kept a large cardboard carton, for holding wastepaper and other refuse which the maids collected from the cabins and wash-rooms. It was the duty of the special officer on his rounds every night after 12:30 a.m. to inspect these linen closets for the purpose of seeing that the porter, who had to empty the contents of the carton into the lake or into a receptacle kept on "D" deck, if the ship was not sailing at the time, had in fact done so. The cleaning up of the rooms was done in the mornings. In the evenings the maids also made the rounds of the rooms to change towels and should have finished this duty by 7:45.

The maid or maids who used the port linen locker were not called but the maid who used the corresponding locker on the starboard side of "C" deck said that the cardboard box was placed in the corridor and taken away from there. According to her it was never put in the linen locker. The chief steward said that there "might be an empty box, but not all the time," in the locker. Brown impressed me as speaking of what he had seen.

The actual cause of the fire was not established but it should be mentioned that two of the passengers gave evidence that they had on this voyage observed maids smoking cigarettes in the port linen closet—one when the ship was at Cleveland between 10:00 and 11:00 in the morning, and the other while it occurred in the daytime, the passenger who made the observation was unable to state the particular day. Dr. Joslyn Rogers examined what was left of the locker and its partly burned contents, of which there was considerable, but could find no evidence of there having been anything in the locker which might have caused the fire to start spontaneously. Beyond that the evidence does not go. There was no evidence of the fire having been deliberately set. Those who had access to this locker were the maids, the captain, chief steward, the second steward, the cabin steward, the special officers and the bellboys.

The presence of fire in the ship was discovered by a passenger, a Mr. Church, who noticed what he described as a haze in the aft part of the starboard corridor on "C" deck as he entered that corridor from the lounge at the stern. He traced this haze, which proved to be smoke, to the above mentioned linen locker. When he reached this locker he observed that the smoke was coming from around the sides and top of the door which he tried but found locked. He could hear what he described as "a rustle and small crackling". He assumed there was someone inside and kicked and pounded on the door. Not begin able to enter, he ran forward in the port corridor to the social hall amidships, calling out that the boat was on fire. As he arrived amidships he met the head bellboy, O'Neill, told him the situation, and the two ran back to the locker. Mr. Church and O'Neill do not entirely agree in detail as to their subsequent movements. Church thinks that O'Neill had a key with him with which he unlocked the door right away, but the latter said he did not carry the key and that on arriving at the locker and observing the smoke, he ran back amidships and down the main stair to the steward's office on "D" deck for the key, returned up to "C" deck and before opening the door of the locker proceeded past it and out to the lounge at the rear of the ship for a fire extinguisher. He then returned to the locker, unlocked the door and commenced to use the extinguisher. According to Church, it was dark in the locker when the door was first opened. He was down on his hands and knees for fear of an out-rush of flame. He says that he could see something white back in the locker and he could see a flame which would go out but another would light up. He had the impression that the flames were dropping down to the floor from above. O'Neill's observation was that, on opening the door, the wall to his right was in flame and that a white sheet which was hanging down from the ceiling in front of the rear wall was commencing to burn.

In any event, it was not long before it was apparent to both that the fire extinguisher was not going to suffice, as the flames began to come out into the corridor. Church and O'Neill then went aft in the port corridor and pulled down a hose from a hydrant there. Church says that he opened the valve and took the hose forward to the locker, but although he says that he had fully opened the valve, no water came out of the hose. The flames were by this time on the ceiling in the corridor and the fire was flowing out of the locker and going down the corridor as far as he could see in both directions. In his opinion it was then out of control. It was Church's impression that the heat was "volatizing" the varnish in the corridor and spreading the fire. He therefore left the scene, went down to "D" deck, roused his family and left the ship.

A passenger by the name of Gibson who, with his wife, occupied a stateroom on "C" deck immediately across the corridor from the port locker, said that his wife was awakened by smoke in their room and awakened him. On opening the door he saw Church and O'Neill, although he does not identify them by name, using the fire extinguisher on the locker. According to him, the locker was a mass of flame. He saw Church disappear toward the rear of the boat and come back with the fire hose and he corroborates the latter in that no water came from it. He also saw Church leave. He sent his wife out of the room, only taking time to reach for his trousers before going himself. When he got up toward the social hall amidships, he looked back and said there was "lots of fire" behind him.

It is a little difficult to account for the failure of the hose to discharge any water in the hands of Mr. Church, as the evidence is that a number of other hose on the ship did deliver water shortly after. It is suggested either that there was a kink, or kinks, in the hose, which prevented the water getting to the nozzle, or that Mr. Church had not in fact turned the valve sufficiently to unseat it so as to allow the water to pass out of the hydrant, although he himself said that he turned the valve as far as it would go. I think the latter is the more likely explanation of the two, as Mr. Church says that he felt the hose with his hand and felt no pressure in it. The hydrants were all a part of the sanitary system and there is no reason why, unless that particular hydrant was in some way out of order, it would not supply water when the others did. It was, of course, as both the chief engineer, Bonnell and the captain say, never intended that passengers should operate the hydrants.

To return to O'Neill, when he left Mr. Church with the hose, he proceeded forward into the social hall amidships and broke the glass in a fire alarm box there, and then ran down to the gangway on "E" deck where he found the wheelsman, Donaldson, and told him of the fire. O'Neill's idea of the time which had elapsed between the time he met Mr. Church and the time when he turned in the fire alarm was "about five minutes". This estimate, as well as other estimates which were made by other persons concerned on the ship that night, cannot be taken literally, but certainly crucial time was lost in the endeavour to fight the fire before giving the alarm—so much so, that when the alarm was given it was no longer, in my opinion, a question of extinguishing the fire but of getting those on board off the ship. O'Neill's failure to report the fire immediately on its discovery, due to this lack of training as to what to do in such an eventuality, was fatal.

I refer to the following, not for "what might have been", but as a circumstance emphasizing the seriousness of the lack of training just mentioned. Of the crewmen on duty with fire stations assigned to them it so happened that seven had been assigned to hydrants on "C" deck; three to number 20, on the star-

board side aft of the cross-corridor on which the locker where the fire originated. abutted: one to number 40, just outside the port doors opening into the same corridor; and another to number 39 in the inside port corridor on which the locker also abutted. Still another was located amidships on the port side. This was the merest accident, of course, as, had the fire started on "A" deck, for instance, there were only two on duty whose fire hydrants were on that deck, while on "B" and "D" decks, only one man was available for each deck. The situation being what it was on "C" deck, however, if O'Neill had broken the fire alarm glass before attempting to open the locker door and fight the fire, the three senior officers actually present on "A" deck would have had the opportunity of repairing to the scene of the fire, where two of them could have taken charge of the available extinguishing apparatus, while the third could have sounded the alarm, which would have brought the above mentioned seven men to the vicinity. It is quite possible that had this been done, one or more hose would have been put into operation by people who understood the operation of the valves at a time when it was possible to control the fire. However, even this chance opportunity was lost.

Having accounted for his movements up to this point, as above mentioned, O'Neill, at a later stage of his evidence, said that he had broken the glass and given the alarm to the wheelsman before going to the steward's office on "D" deck for the key and it was shown that he had, on a prior occasion, made a statement to that effect to representatives of the owners of the steamship, although he had also, prior to his having given evidence before me, given evidence before the Ontario Fire Marshal which corresponded with his evidence in this inquiry. While it cannot be said that O'Neill was a satisfactory witness, I think it is perfectly clear from other evidence that the alarm was given only after O'Neill had endeavoured to fight the fire at the locker. The fire could not have attained the proportions it had when the alarm was ultimately heard, if it had in fact been given before O'Neill had attempted to extinguish it.

As already mentioned, immediately after O'Neill gave the alarm by breaking the glass, he ran down the central stairs to "E" deck where he had earlier in the evening seen the wheelsman, Donaldson, at the passenger gangway and gave him the warning. Donaldson at once ran up to the officers' quarters forward on "A" deck. When he reached "D" deck amidships he looked aft down the corridor and says it was all filled with smoke and he thought the fire was there. As he proceeded from "D" to "C" he met passengers proceeding down. On reaching "A" deck he did not notice any smoke and proceeded out of the main cabin to the port side of the ship and forward on the deck where he found Captain Taylor standing outside his door. Donaldson says he simply said "fire" and kept on running around to the mates' quarters on the starboard side where he found the first officer, Wood, just getting off his bed. Donaldson told him of the fire and then ran back to the port side and aft on "A" deck. He said that there was a lot of smoke aft on that deck at that time.

Wood, who had come off duty at midnight, having been relieved by the second officer, Bowles, says he had been lying on his bed when he heard the alarm bell ring in the mates' quarters. He says he had started to put on his shoes and trousers when Donaldson came along and told him "there is a fire on 'C' deck". At that time he says he could smell smoke. He immediately proceeded out of his room, could see heavy smoke going out of the starboard side of the ship, either from the dining-room (which is amidships, on "B" deck) or off "C" deck. He judged the fire sufficiently serious for the klaxon to be sounded without further investigation. He therefore ran up the eight or nine steps to the wheelhouse above "A" deck and threw in the switch which sounds the klaxon system. Immediately after throwing in this switch he pulled the lever which makes electrical contact for the whistle. He says he intended to give the signal, one long, three short and one long, but that although he pulled the lever back again,

the whistle kept on blowing. He then tried to telephone to the engine-room but getting no response he then came out of the wheel-house and went down to "A" deck. At this time he says he could not get aft farther than perhaps the first three cabins on the port side of the deck, where he banged on the windows and shouted "fire". The starboard side, according to him, was full of fire and the covers on the boats were burning and he could not go aft there or go inside the cabin structure because of fire. If this witness is at all correct in what he did on hearing the alarm bell and his observation of the state to which the fire had progressed, both when he came out of his quarters originally and after he came out of the wheel-house, O'Neill could not have given the alarm before he attempted to fight the fire.

The evidence of Bowles, the second officer, establishes the same point. He was in his room forward on "A" deck on the port side opposite the first officers' quarters when he heard the alarm signal. He says that he ran out of his door and saw a lot of smoke up over the top of the ship amidships. It seemed to be coming out of the hurricane deck on the starboard side. He said the smoke was very heavy all around, coming forward in the cabins on the deck he was on. He ran for the wheel-house but only got half-way up the stairs when the klaxon sounded. He was in that position when Donaldson came around and passed him going aft. Bowles then went down the stairs and inside the cabin through the centre door admidships on the port side. At that time the inside was full of smoke coming up the stair-well and going out of the center doors on "A" deck.

Harper, a dock watchman of the Canada Steamship Lines, was on the west side of pier 9 near the bow of the "Noronic" when he saw fire breaking through what appeared to be a window toward the stern of the ship on the starboard side between "B" and "C" decks. He had heard no alarm from the ship. He immediately ran into the building on the dock, quite close to where he was standing, where there was a telephone, dialed "operator", asked for the fire department, got through immediately and gave the alarm. He then called the police department and while still on the 'phone someone called in the door for him to get an ambulance. He called the police department again, telling them to send all the ambulances and doctors possible. Then he went outside and says that at that time the starboard side of the ship seemed to be going up in one mass of flame from the funnel to about midships on all decks from "D" up. While he was on the telephone inside he heard a boat whistle and as he came out the Toronto Fire Department were arriving, which, according to the evidence, was at approximately 1:41 a.m. It was apparently a passenger named Pearce who had called to Harper while he was on the telephone to obtain ambulances. This witness had been in the lounge at the stern of "C" deck until approximately 1:15 a.m. and had gone down to his room on the starboard side aft on "D" deck where he stood for some time talking with some other passengers. He smelt smoke and on going to a window or port hole in the outside wall of the ship, he heard someone ask for a fire extinguisher. He then went to his stateroom and proceeded out along the corridor on "D" deck where he saw some fire hose on the floor but there was no one using it. He thought there was no pressure in it. As he proceeded out there were burning embers falling down through the ceiling from "C" deck through vents around the stack casing, separating the port from the starboard corridor running along the after part of "D" deck. He says when he reached the place where the two corridors merge there were other people there and he met one woman with her hair burned away and her face and arms scarred. As he reached the purser's office he says there were 25 to 30 people there and he proceeded down to "E" deck and off on the dock. On going outside he ran toward the building on the dock looking for a 'phone and when he got in he said there was a man just hanging up the 'phone and on asking him if he had called the fire department the answer was "yes". He then told him to call doctors and ambulances, that there were people badly hurt. He says the man to whom he spoke

immediately turned around to use the telephone again and he went back outside. It seemed by that time that half of the upper decks were in flames.

Captain Taylor returned to the ship shortly after 1.25 a.m. He was in the company of a lady passenger, Miss Kerr, who occupied a stateroom on "C" deck very close to the port linen locker. Miss Kerr had not taken her key with her when she went ashore that evening and Captain Taylor accompanied her up to her stateroom and unlocked her door for her with a key which he carried. Miss Kerr went into her stateroom where her two young nieces were sleeping and then proceeded to the women's wash-room which, as I have said, is immediately aft of the two linen lockers, but is entered from the starboard corridor. Her passage to and from the wash-room took her through the passageway connecting the port and starboard corridors so that she was immediately beside both linen lockers on those occasions. She returned to her room and had just completed her preparations for settling down for the night when she saw smoke coming in under her door. There had been no alarm. On opening the door and looking out into the hall she saw that the smoke was coming out from under the door of the port linen locker. Just then she says she saw two bellboys and two male passengers open the door of the linen locker when a great deal of smoke came out. One of the boys, she said, had a small fire extinguisher which he used and then a hose, which was close by on the wall, was unfurled. Just when the nozzle was at the threshold of the linen locker, she turned back into her room to awaken her nieces and get them ready to leave. While she was getting the little girls up she heard the progress of the fire outside and heard people running. By the time she and her nieces got out of the door of their stateroom she says there was a sheet of flame coming out of the linen closet, cutting off any idea of progress aft.

Captain Taylor said that after leaving Miss Kerr he walked forward on "C" deck and up the stairs amidships to his quarters on "A" deck. He said he had spilled his keys off his key ring earlier in the day and for that reason they were not in their usual order on his ring. He says he was fitting the different keys into the lock of his room when Donaldson came up and reported to him the presence of fire on "C" deck.

It is apparent that considerable time must have elapsed between the time the captain left Miss Kerr at the door of her stateroom and the reporting of the fire to him by Donaldson. There was no one around the linen locker when Miss Kerr proceeded to and from the wash-room and she was settling down for the night when she noticed the smoke coming in under her door. The captain says that on getting Donaldson's information he proceeded aft on "A" deck and to the port door of the passengers' quarters forward. As he entered he says he looked at his watch and noticed that it was between 1:30 and 1:35. He ran on down to "C" deck and there was no sign of fire or smoke before he arrived there but there was smoke in the social hall and the corridor aft of the social hall was full of smoke. At this time he heard the klaxon. He says that he then realized it was a real fire; that he shouted "fire" several times; that he went out on the starboard deck through the doors amidships and shouted "fire" and "for them to call the fire department, that the ship was afire". At this time he says there were a lot of people on the dock. Harper, the dock watchman, said that at the time he first observed the fire on the ship and went in to telephone there was no one on the dock so that the time the captain got out on "C" deck must have been a later time. Captain Taylor says he went back inside "C" deck, crossed over to the port side and rushed down to the after doorway on the port side opening into the passageway leading across beside the linen locker from the starboard to the port corridors inside. There was too much smoke inside the ship for him to have gone back by mean of the inside corridors. He says that before going inside the aft doors he pulled a hose off the wall, opened the valve and, on going inside, played the water around "that linen closet and right across on the starboard corridor there." At that time he was alone. The door of the linen closet was closed

and there was fire on all the walls on the after side of the corridor and on the starboard side of the starboard corridor. It is plain, therefore, that Captain Taylor did not arrive at the locality until after Mr. Church and O'Neill had exhausted their efforts and had left.

O'Neill also says that immediately after he told Donaldson of the fire he went back up the stairs to "D" deck and aft on "D" deck to the bellboys' quarters to arouse five bellboys who were asleep there. Having aroused these boys, he started back forward on the port side of "D" deck but as he did so he observed a whole mass of flames in the corridor and a man was there playing a hose up the side of the wall. He therefore turned back to the stern of the ship.

These are sufficient references to the evidence to indicate that the alarm given by O'Neill was after he had aided Mr. Church in attempting to deal with the fire at the locker and that by that time the fire had reached an advanced stage.

The discovery of the existence of fire on the ship was an accident. Mr. Church happened upon it as he was proceeding along toward his stateroom. According to the "Notice to Passengers" which hung in his stateroom, he was instructed "In Case of Fire, Promptly Notify Any Member of the Crew". It does not appear that he had read this notice, but in notifying the bellboy, O'Neill, he was apparently carrying out what the company desired passengers to do. As to what O'Neill should have done on being so notified, he was, as I have said, without definite instructions or training. Wood testified as follows:

- "Q. What did you tell them to do in the event of fire?
 - A. To call the officer on watch.
 - O. How would they do that?
- A. Well to find him wherever he would be around the ship.
- Q. If one of the members of the crew should smell smoke or see fire, he would go and look up the officer, is that what you mean?
- A. Yes, that is what I mean. In other words if they saw fire, to let somebody know, either the chief or his second or some of the mates around or some of the stewards around—the head of the steward department.
- Q. Mr. Wood, you have a rather careless way of making an important answer—first of all 'to notify the officer on watch' and now you say 'notify any officer who might be around', is that it?
- A. Yes.
- Q. But what my question was, what did you tell the crew member to do in the event of fire? Now get your mind on that special question and let me know what your instructions were—that is, how did you educate them—what did you tell them—that is what I am interested in?
- A. The wheelsman—I instructed these wheelsmen to let their officer on duty know in the case of fire.
- Q. The wheelsmen then had specific instructions if they saw fire to notify the officer on duty?
- A. Yes.
- Q. Now is that right?
- A. Yes.
- Q. The officer on duty?
- A. Yes.
- Q. Anybody else?
- A. No I cannot say as I have.

- Q. Now I do not want you to say anything except what you have told them—now did you tell anybody else what to do in the event of fire?
- A. No.
- Q. Are you sure about that—are you fair to yourself when you say that the only people you told to do anything in the event of fire were the wheelsmen?
- A. No, I think I have told—I am almost sure that I have told more than the wheelsmen.
- Q. And what did you tell them?
- A. To let the officers know.
- O. The officer?
- A. Yes.
- Q. Or any officer?
- A. Any officer.
- Q. Any officer that they might find?
- A. Yes.
- Q. Now is that what you meant, and does that cover the ground so far as you gave any education on that point to any member of the crew?
- A. Yes, except the steward or purser—
- Q. You do not need to repeat. Does that cover what you did in the way of educating the members of your crew—is that right?
- A. That is right.
- Q. Did you not tell them anything else as to what they were to do in the event of fire?
- A. No, I cannot say that I have.
- Q. I would suggest to you that you told them to go down and get near a fire station?
- A. No.
- Q. You did not tell them that. Mr. Wood, I am trying to get at what you did, if anything. Now did you ever do anything of that kind?
- A. Yes, yes, I have in this summer—through the summer some time—I have told them to get to a fire station or a hose—somebody get that and let the officer on watch know.
- Q. Well then if one member of the crew, just wandering around, saw some smoke or some fire, would he get a fire extinguisher first in accordance with your instructions or would he not—that is would he get the officer on watch, or did you tell him that?
- A. Oh I do not know what he would do in that case.
- Q. What did you tell him to do, if anything?
- A. Well I am not sure which I told him to do first.
- Q. Now may I just pursue that for a moment, because we have spoken of both 'fire extinguishers' and 'hose' and one can easily conceive of a situation where a fire extinguisher might be the proper thing to use and another occasion where a hose would be the proper thing to use and not a fire extinguisher—you would agree with me on that?
- A. Yes.
- Q. Were there any instructions to the deck crew as to how they would determine whether a fire hose was to be used or a fire extinguisher?
- A. No, sir.

- Q. Was that anything that a person, like a bellboy, should take upon himself to decide, that this is a case for a fire extinguisher?
- A. Well if he thought it would put it out.
- Q. I say, was it anything that a bellboy or a wheelsman—take a bellboy—that a bellboy for instance should turn on a two inch hose over the ship without any instructions or without the knowledge of an officer aboard ship?
- A. Yes, he would have been right in doing so.
- Q. Well then did you ever instruct anybody about that?
- A. I never instructed them, no.
- Q. And no one of the officers to your knowledge ever gave instruction of that kind?
- A. Not that I know of.
- Q. Would this be fair, and now correct me if I do not say it correctly—that so far as the education of the crew in the event of fire was concerned—all they had was what they saw on the printed chart in the crew's quarters, which took them to their various stations in the event of hearing the alarm—is that all they had—apart from what you have just said as to what you might have told any particular member of the crew—does that cover the whole field?
- A. Yes, that covers it."

I do not think this evidence requires comment. It is a fair sample of the rest of the evidence on this aspect. In my opinion on all the evidence it is clear there was no training of the crew with respect to fire or its detection or what should be done after its detection, apart from whatever might be picked up by attendance on fire drills, limited as they were to a race at a known time to the hydrants, the taking down of the hose and the playing of some of them, together with the demonstration to some members of the crew of how the fire extinguishers operated. It is true that Mr. McLean, the chief steward, was nervous about fire and had told his bellboys to let him know if it were discovered by them, but this was a private arrangement of his own and was apparently lost on O'Neill. The lack of any effective system of patrol for the purpose of fire detection and the lack of any system by which when fire was detected, the information of its presence and location could immediately be sent to some central locality, where personnel, trained in methods of dealing with fire, were available to be sent to the spot immediately, accounts, in my opinion, for the loss of life which ensued. Some such organization was, in my opinion, a minimum to ensure the safety of passengers asleep in their staterooms. By the time O'Neill made up his mind to give the alarm it was then too late to control the fire, the only thing remaining to be done being to arouse the passengers and get them off the ship. The situation was even more aggravated while the ship was in port than when it was at sea because of the fact that, beyond the comparatively few crew members actually on duty at the time of the fire, all the others were free to be ashore where many in fact were. Even if all had been on board, however, the lack of system already mentioned still existed and the discovery of fire, certainly during the forty-five minutes of every hour when the patrol was not in effect, could only be, as the event proved, an accident. I therefore think that it would not be useful for me to discuss further what thereafter occurred on the ship during the progress of the fire apart from giving an outline of what was done or not done by the crew to get the passengers out of their staterooms and off the ship. Much was done by some of the passengers to arouse others, but their conduct is not under investigation. Scattered attempts were also made by various crew members by the use of hose to put down the fire, but these were, at best, merely delaying, if they had any effect. The pressure in the hose soon

became reduced and ultimately failed completely. If more than six hydrants were used simultaneously, which did occur, the pressure would lessen. The only explanation for the complete failure of the water supply is either that the pumps were shut off by the engine-room crew before they left (which is denied) or that there were one or more ruptures in the mains. This result would also be brought about if one or more hose were burned off while in operation, leaving the water to flow freely out of the hydrant or hydrants.

ROUSING OF PASSENGERS BY THE CREW

The outbreak of fire on a ship at a time when it has a large number of sleeping passengers on board requires of necessity, a pre-arranged plan for rousing them and getting them off the ship. As already pointed out, the "Noronic" had no such plan, any organization which the ship did have being designed to function in other circumstances when a complete crew was on board. Wood deposed:

"O. Now then I may have asked you this but even at the risk of repetition I will ask you again—I understand from your evidence that in ordinary practice when this ship stayed in port on any of these occasions over night, there was no one to whom was assigned the

duty of arousing passengers in the event of fire?

Accordingly, the fire, which occurred, found the ship totally unprepared to deal with the situation. The result which prevailed was the natural consequence.

Notwithstanding that no passenger who was called as a witness heard the klaxon alarm, (which was also true of a number of the crew) I think Wood's evidence that it was sounded, corroborated by the evidence of others of the crew, should be accepted. I think the explanation for its not being heard by the great majority of those on board was that it was almost immediately drowned out by the whistle which thereafter blew continuously. This was the experience of several of the crew.

It is at first glance surprising that on "A" and "C" decks so many passengers, presumably, were not aroused by the whistle, which made a great noise and some vibration throughout the ship. In fact no witness said that he was awaked by it. At the time it was blown however, the fire was already well advanced from its starting point on "C" deck. There was a twelve mile wind from the south-west, which would accelerate the upward and forward rush of the flames, heat and smoke through the corridors and open spaces on "C" deck and through the decks above. With one exception those who perished occupied staterooms on "A" and "C" decks, there being only one of the occupants of "D" who was lost. Dr. Rogers in his evidence described the extreme rapidity with which fire advances in structures of the character here in question and it was his view that many deaths were due to the high temperature of the air inhaled which produced unconsciousness, death following from monoxide before there was any physical contact with the flames.

A number of passengers who gave evidence were examined with regard to the extent, if any, to which there had been drinking on board which might have accounted, in part at least, for the failure of so many passengers to become aroused or aroused in time to get off the ship. On the evidence of those examined, however, this could not have been the explanation. The ship's bar had been closed about 6:00 p.m. when the ship docked, and any intoxicants which were consumed after that time would have had to have been obtained from the city or must have been already in the possession of the passengers. The special officer, Brown, said that on a comparable cruise in the preceding year, there were on board what he described as "a bunch of drunks", but that on the cruise in question the situation was quite orderly.

When the alarm was given, there were on board the ship, the Master, the first officer and the second officer as well as the chief engineer and chief steward, only one, namely, the second officer, being "on duty". No one, however, took general direction. Each officer acted independently like an ordinary member of the crew. The ship was equipped with a public address system with two microphones, one in the Observation Room forward on "B" deck and the other in the purser's office amidships on "D" deck, with some twenty-two loud speakers located throughout the ship. The use of this system for arousing or directing the passengers in such a situation had, however, never been contemplated and no one thought of using it on this occasion. Whether it could have been heard above the din of the whistle one cannot say. It was not tried.

There had been installed also, some three weeks before the fire, a modern Marconi ship to shore telephone in the pilot house, by means of which an immediate call to the Toronto fire department could have been made through the wireless station on Toronto Island. No one thought of using this either, and both the first and second officers testified that the instrument required some time to "warm up" before it could be used. They apparently had never been instructed (in any event they were unaware) that while that had been true of the instrument which had been replaced, it was not true of the existing instrument.

The Captain

Captain Taylor says that as he first reached "C" deck and was crossing it, he heard the klaxon go. He did not notice any response on the part of passengers. He then went to the neighbourhood of the port linen locker, already mentioned, where he was shortly relieved of his hose by two members of the crew. Going forward outside on the port side to the central doors, he says he hammered on the windows of the passenger cabins with his hand, but got no response and waited for none. The rooms were all in darkness and he did not know whether or not people were sleeping there.

He found it impossible to enter the social hall and therefore went forward to the forward doors, tapping on windows, again without result so far as he noticed. At the bow he saw people going over on ropes and also people in the water. He then retraced his steps as far as the crew stairway at the stern, passing the two crew members who had relieved him, still using the hose, although they were now outside the corridor on the promenade. The captain thinks he shouted on this trip but does not recall rapping on any of the windows. Again he observed no response. He said:

- "Q. I am not drawing any inference at all but you had long since realized, as you told us, that the fire was of such a character that it could not be put out by the crew.
 - A. Yes.
 - Q. Then did it occur to you that the thing to do was to see that the passengers were aroused on the ship?
 - A. There were passengers forward going over—
- Q. I did not ask you that. I asked you if it occurred to you—I am not drawing any inference at all but did it occur to you that in that situation the thing to do was to see that the passengers were aroused and got off the ship?
- A. It did sir.
- Q. But yet you walked back from the forward end of the ship right back to the stern without seeing that a single passenger was aroused?
- A. I do not recall rapping on windows on the way back.

- Q. But you say that you did realize at that time that the thing to do was to get the passengers off?
- A. Yes sir.
- Q. I am just trying to understand. If you did realize it at that time why didn't you see that those passengers in that line of cabins you passed were in fact aroused?
- A. The heaviest part of the fire was aft. I did not realize whether everyone was out, and after I turned at the stern the fire started coming through windows forward of that as well.
- Q. I am talking now of your progress from the bow to the stern. You saw no members of the crew arousing passengers?
- A. I did not see anyone along there that I recall.
- Q. I am just trying to understand why you did not make some effort to see that those cabins were empty. You say there was no fire at that time there on the outside?
- A. I did that later.
- Q. I am talking about now?
- A. No, I did not."

At the stern, as at the bow, he observed people going over the side to the water by means of ropes. He did not stay to see who was conducting this operation but turned forward again on the port side, passing a row of seven cabins without doing anything with respect to them. This time, he says that on reaching the two crew members still using the hose, he took it and with the nozzle broke the windows and played the water into some of the cabins forward of the group just mentioned, as he saw fire break out inside. From one of these, with the aid of the two crewmen, and special officer Brown, a man and woman were rescued. Brown was using an axe on the windows.

The Captain testified:

- "Q. Why was it necessary for you to travel in this company of four? Did it occur to you to send these men to do something else?
 - A. There wasn't enough time to arouse people there. It was so late when I realised that I couldn't get it out, I guess. I told officer Brown—I spoke to him, I said 'we have got to get these people out, arouse them'.
 - Q. I am just asking you, going along in that locality that you have mentioned there were four of you, is that right?
 - A. I don't think there were four. There were for a few minutes.
 - Q. There were at least three?
 - A. There was at least three and myself.
 - Q. Would it take more than one to arouse one cabin?
 - A. They were breaking glass in the window—.
- Q. No, no, would it take more than one person to arouse one cabin?
- A. No sir.
- Q. I am just asking you, did it occur to you to send the other three men some place else to do that?
- A. It didn't."

Shepley, the wheelsman who helped him, said:

- "A. Well, to tell you the truth sir, we were bounding from one room to the next but we were playing it in this room. We would play it in this room and look to see if there was anyone in there. If there was none in there we would go to the next room. If there was someone in there we would take the screen off, break the window and get them out.
- Q. How many did you get out that way?
- A. Well, I don't know.
- Q. Did you get more than one?
- A. Oh, yes, that is for sure.
- Q. Did you get two?
- A. Yes, we got more than two. We got three or four. I know that I remember of. Well, the further on the fire went the more running around I did and the more excited I got and from there on I don't know what. I just went over the side and they hauled me to the hospital."

The Captain says he again proceeded forward on the port side to the bow, shouting, and with the nozzle of another hose he had picked up, broke the windows in three or four of a row of thirteen cabins forward of the social hall, played the water inside and put out the fire in each. He saw no one in any of these cabins. At the bow the first officer was helping people over on ropes and the Captain asked him if he thought everyone was out, to which Wood replied that he did not think so. The Captain started to go through the forward doors into the cabin but was prevented by Wood who says it was "full of smoke and the fire was in there". One of the passengers who was waiting her turn to go down by rope, saw the Captain and said:

- "... he had this hose in his hand and the hose was not full up as it should be and he was doing this with it. (indicating)
- Q. What do you mean by 'doing this'?
- A. As if he were trying to spread water. As if he thought he had a stream of water—that was my impression."

Captain Taylor says he left the bow and again proceeded aft on the port side and smashed windows as he went along with the hose he had picked up on the bow. He says "there was not much water in that hose" and he dropped it because it was no use. He then picked up another hose which was lying on the deck and used it on a few of the rooms. In this there was water but the pressure was getting low. He continued back to the rear cabins on that side. The hose, which was only fifty feet in length, did not extend that far and he does not recall having done anything with respect to the cabins he passed. At this point he says two crew members he met told him he had better get off the ship and a man in a small boat shouted the same thing. The three therefore proceeded down by the crew's stairway to "D" deck and ultimately left the ship. Captain Taylor also says that he returned as he "thought there might be some person that had got up on 'C' deck because there was no fire outside there when I came down". He went in through the engine room and up to "C" deck by the crew stairs and ran forward on the port side until he could see right into the bow. He says there was no one there and he retraced his steps and left the ship.

The question as to whether or not the captain was intoxicated was raised and should be dealt with. Some time after Captain Taylor had reached the dock, a Toronto policeman noticed that he had an injury to his hand and two police officers endeavoured to have him go to the hospital. One policeman said that the captain kept "calling for a captain, some other captain there he wanted to see very much and he said he wanted to go back in there to find him". Both officers said they could smell liquor on the captain's breath when they were close

to him but apart from that both testified that they did not see any indication that he had been drinking. They said he was very excited and kept fighting to go back on the dock. Neither Miss Kerr, who had accompanied him during the evening, nor the taxi driver, who had brought them both back to the ship, observed any indication of intoxication on the part of Captain Taylor. The captain himself testified that he had had only one drink.

First Officer Wood

Wood testified that after blowing the whistle and coming out of the wheel-house, he could not get aft on either side on "A" deck beyond the first few rooms on the port side on account of the fire and for this reason made no check on what any other officer was doing. The only attempt he made to arouse passengers on this deck was by knocking on the windows of these few rooms without getting any response.

Wood then went down the ladder on the forward part of "A" deck to "B" deck where he found a number of passengers. At this time the Observation Room was full of smoke and there was fire to be seen there. He says it was impossible for him to go down the starboard side of that deck at all and it was possible to go on the port side only as far as the forward door. Wood then told the passengers gathered there to go down to "C" deck and he followed these passengers down, where he found other passengers, there being 45 to 55 altogether. He saw no officers or members of the crew on "C" deck. On reaching that deck he started to get the passengers going over the bow by means of a rope and was joined in this operation by the boatswain and an oiler or water tender. While this operation was going on, he went back on the port side of "C" deck but he reached only the second room from the bow as "the windows and parlours were full of fire". The deck was full of smoke and the paint on the outside of the cabins and the frames of the windows were burning. The fire was at such a stage that it was impossible for him to attempt to arouse passengers even in the two forward staterooms. He therefore returned to the bow and was there when the last two passengers went over the side. He and the boatswain left by the firemen's ladder, at which time all the windows were gone out of the forward end of "C" deck and the paint on the forward stairs up to "B" deck was burning.

Second Officer

The second officer, Bowles, testified that when he heard the alarm and came out of his quarters forward on "A" deck, he went aft and through the doors amidships on the port side. At that time the interior was full of smoke and flame was coming up the starboard stairway from "B" deck. As he entered he says that he met four or five passengers coming out. There were also three or four bellboys. On going inside he ran aft, knocking and kicking on the doors of four or five of the passenger cabins and calling "fire". He says some other crew members were there doing the same thing and he told one of them to knock on doors and send the passengers aft.

Bowles then turned and went forward, calling "fire" and "telling people to get back aft", and with a hose he pounded on five or six doors and turned it on the starboard stairway amidships. He said the smoke got too much for him and he ran out the forward door on the port side where he found a hose lying on the deck which he took back inside and used it there. Shortly, he threw the hose down and started knocking on the cabin doors along the port side forward and was able to reach approximately seven of them. Returning outside he pulled the screens off some nine cabins on the same side. This was as far back as he could get. In one of these he says there was a man trying to get his wife out. He does not say what happened, but these were the only people

he saw in the cabins although he broke windows and looked in as well as he could. The cabins were catching on fire and the roof of the deck was on fire. He therefore ran forward and around to the starboard side to see if his wife had remained in his room but she had gone. At this time the deck was pretty much on fire. He found quite a few passengers here and told them to go over the bow and down on the cable on the port side, the starboard side being all on fire. He went down himself over the bulwarks to "C" deck where he found quite a few people and helped to get them down over the bow. He then went back on the starboard side of that deck, knocking on some of the windows, first trying to get into the social room through the forward starboard doors but could not as it was all on fire. Not getting any response to his knockings, he threw a couple of Jacob's ladders over the side and then went back to the bow. As the people there were "pretty well off", he jumped on a cable and went over the side.

Steward's Department

The chief steward, McLean, who occupied a room amidships on "D" deck, was awakened by smoke and as he dressed he heard the fire reels. The fire was therefore well advanced. On going out of his room into the lobby he observed a man at the foot of the main stairway with a hose playing it on the stairs. McLean went up to "C" deck and found the ceiling aft of the social hall in flames. He says he knocked on cabin doors on both sides of the corridor up to the point it splits into two, getting some response on both sides from passengers who opened their doors but in some cases there was no response. He then proceeded forward knocking on the doors of the cabins on both sides as far as the forward stairway, getting some of the passengers out and giving them instructions to go down the center stairs. He saw no other members of the crew on "C" deck. He himself went down and on reaching "D" deck directed some passengers down and went with them.

The Assistant Steward

This officer, although he gave evidence, was not well and had to be excused from the witness box before telling his movements on the night of the fire, It was he who wakened the cabin steward.

Cabin Steward

This man was sleeping in his room on the port side of "D" deck aft and was awakened by the assistant steward, who told him the ship was on fire. He went forward on "D" deck, at which time there was water and embers coming down from above through the vents in the ceiling. His first thought was to get the Ship's Articles, which were in the steward's office amidships, and as he went forward to get them he met passengers going aft. On reaching the steward's office he found that the steward himself had left. Realizing that he did not have his keys for the drawer where the Articles were kept, he ran back to his cabin and returned, again encountering passengers who were going forward. Retrieving the Ship's Articles, he looked on the purser's desk for the passenger list but it was not there. On going back out into the lobby he says fire was starting on the stairway from "C" down to "D". He got a fire extinguisher but by that time there was so much fire on the stairs that he says it was nonsense to use it and picked up a hose from the floor but found it impossible to extinguish the fire and was forced away by the smoke and heat. People were passing him coming from the forward part of the deck and he followed them down to "E" deck where he met the steward's clerk. Both went off by the gangplank.

Taking time to get a drink of water, he ran back to the stern of the ship and went back on board over the rail of "D" deck. Entering the crew's staircase he found a woman lying there wet and unconscious. He took her out and then ran up the crew's stairway to "A" deck where he found three or four passengers and some 10 or 12 Chinamen outside on the stern. These he directed and helped down the crew's stairway. He then went through the crew's quarters at the stern but found them empty. Returning to "D" deck he went to his room where he got some clothes and went off the ship.

Chief Engineer

This officer, Bonnell, on being roused by the fourth engineer, instructed the latter to see that all the men went to their fire stations at once and to put on the general service pump in addition to the sanitary pump then working. Bonnell remained in the engine room for some time after the klaxon sounded and then started for the steward's office to consult the annunciator there to learn where the fire was. He could get no farther than the main stairs to "D" deck because of smoke. He returned to the engine room and "stood around there a while and as the smoke kept getting thicker—it got at last so we could not breathe", he ordered the pumps to be left on and the men to be ordered out of the stokehold and the third engineer to go to the stern where there might be someone needing help. He himself went to the dock through number five freight door on the starboard side. Bonnell said his place was in the engine room as long as possible and that he had no duty in connection with arousing passengers. He said:

- "Q. What can you say as to the activities of any members of the crew of the boat during the fire other than what you have told us about?
- A. I can't tell you anything. The only thing I was interested in was the engine room and the men were in the engine room. The other boys went to their fire stations and I can't tell you what they were doing. All I know was that they left the engine room and their rooms to go to their fire stations."

The movements of the third engineer, who was on duty, closely parallelled those of his chief. He does not however, mention his instructions to go to the stern and did not do so.

The fourth engineer was wakened by the call of fire. He wakened the chief and sent his men to their fire stations. He then tried to go up to see where the fire was but was driven back by smoke and people coming down the crew stairs. One of these he helped off the ship. He himself returned, retrieved some clothes, and left.

Other Crew Members

(a) Bellboys

O'Neill, the head bellboy, having aroused the other five sleeping bellboys in the after part of "D" deck, says he found so much flame on that deck in the passenger quarters on the port side when he attempted to go forward again that he went out on the stern where he assisted passengers and some waitresses to go off by ladders put up by the fire department. Before going off himself he went to his room and took a suit, a sport coat, shirts and socks, as well as his valise. With respect to the time when he attempted to go forward on "D" deck after awakening the bellboys, he testified:

- "Q. At this time you knew there was a fire which was not under control?
 - A. I knew there was a fire.

- Q. So far as you knew, you knew there was a fire which had not been put out?
- A. That is right.
- Q. Did you arouse anybody else apart from bellboys?
- A. No, sir.
- Q. Did that thought occur to you?
- A. No, sir."

As to the movements of the bellboys awakened by O'Neill, the latter said that one went up to the waitresses' quarters to rouse them. Others were observed by Pepper, the wheelsman, knocking on doors of passenger cabins aft on "D" deck.

Eddy, one of the bellboys on duty had gone down to the social hall on "C" deck and taken up an extinguisher. This he dropped in the corridor aft of the social hall when he realized it was useless, in the conditions then existing, and went outside and aft to the doors opening into the passage-way abutting the linen locker, as he thought that was the only way to reach the seat of the fire. Somewhat aft of this passage-way he discovered a woman in one of the cabins in a hysterical condition. At this point he was joined by Vaughan, another bellboy, and both tried to pull the metal screen off the outside of the lower part of the window. Meeting with some difficulty, Eddy, who thought the fire was spreading too fast for both to stay in the same vicinity, left Vaughan to get an axe and get the woman out. Eddy says he went up to "A" deck with the intention of arousing as many of the crew as possible to see what could be done to fight the fire, as he thought that very few of the crew beyond those on watch were as yet awake. He found a number of the crew in the crew's quarters and roused them. He then went out on the stern of the deck where some of the crew and, he thinks, passengers also, were arriving. Eddy despatched some bus boys forward to awaken passengers and directed the making of lines out of sheets for the purpose of enabling people to go down over the stern. He says that all who were in this locality got down from "A" to "C" over the stern and some went on down into the water. Those remaining went down by the crew stairway to "D" and some on down to "E". Eddy says there were a lot of young waitresses and boys in the party. They then went forward to number five freight door on the starboard side. This was open but the dock outside was on fire. Eddy therefore went to the port doorway opposite and found it, as well as all the other doors on the port side, closed. He says he got a wrench and opened number five door and saw to the embarking of those with him in a boat, while he ran back into the engine room and up the crew's stairway into the passengers' quarter on the port side of "D" deck but everything seemed to be completely on fire and it was impossible to go through. He therefore ran back into the crew's quarters, taking in passing, a coat from his own room an went off on a fire ladder to the dock.

Meanwhile, Vaughan, who had tried to go to his fire hydrant on "C" deck, found himself unable to do so by reason of the heat and smoke. Vaughan says he had joined Eddy in endeavouring to release the lady from the cabin aft on "C" deck but on going for the axe, could not find one. He heard someone breaking windows and called for them to break them all the way down. Someone then called him to go down to "D" deck and he went down. He says he could not go beyond the crew's quarters as the carpets were on fire and the hall was filled with smoke and heat and turned back and found people at the stern leaving the ship by a rope. These people were mostly waitresses but there were some other members of the crew. He left by the same means.

The fourth bellboy, Cote who was on duty, was outside on the port side of "B" deck forward when he observed the reflection of fire in the water and saw fire coming out from "C" deck below. For some time he used a hose and then

found his way outside through the smoke. He went down over the side of the ship to "C" deck where he took down one of the Jacob's ladders and invited two women who were standing there to use it to reach the dock. They refused saying that the rope of the ladder was on fire. They jumped to the dock while he used the ladder to get to the dock.

(b) Members of the Deck Crew on Board

Donaldson, the wheelsman, who had given the warning to the captain and the first officer, went aft on the port side of "A" deck. He says that when he got about half-way back he thought about the passengers and started banging on the windows. He did not stop to see if this had any effect but proceeded on to the stern of the ship, meeting some passengers coming out the aft door, five or six of whom proceeded forward and four or five aft. He went to the wheelsmen's room in the crew's quarters on the aft part of the deck on the port side and roused a wheelsman and then returned forward to the passengers' quarters, banging on a few of the cabins on the port side aft of the social hall. He reached only two or three of them as he was forced outside by reason of heavy smoke. Outside he went back aft, passing through the wheelsmen's room where he found some passengers whom he led out to the starboard side. Here, with the aid of two bus boys, he cleared away a lifeboat in which they all, except Donaldson, went down to the dock, the latter going down on a rope.

The other wheelsman on duty, Pepper, who was at the passenger gangway on "E" deck when O'Neill came down with the alarm, ran up to "D" deck to see where the fire was, and on so doing, saw smoke coming from aft. He ran back to the port corridor to a point under where the fire was burning on "C" deck and, with the aid of some bellboys, took down the large and small hose attached to a hydrant there and both hose were played through the vents in the ceiling beside the ship's bunkers up into "C" deck. After two or three minutes, when they found they could not put out the fire, the bellboys left and went forward on "D" deck to arouse passengers. Ultimately Pepper was driven out and as some passengers came through the corridor from the stern he led them forward and down the center stairs off the ship. He again returned to "D" deck but there was too much fire coming down from above to go back to where he had been, so he left.

The watchman, Guest, whose duties were confined to "E" deck and the sounding of the ballast tanks at the forward end of "D" deck, was forward on "E" deck when he heard a commotion on the dock and observed people going off the ship from number three freight door. Seeing a glare aft, he went to the passageway leading into the after part of "E" deck where his fire station was, but believing that he would be no use there, he went up the main stairs to "D" deck and tried to go to the stern to waken up the deck hands there but could not do so as the smoke was too heavy. He therefore turned back and finding a woman with a small child, took her down and off the ship. He again returned to "D" deck where he found another woman who had fainted, picked her up and took her off. He says he started to return but the dock was all afire around the gangway and he could not.

Special officer Brown, who occupied a room aft on "D" deck near the aft passenger stairway, was aroused by a woman's voice asking "Which way shall I go?". On dressing and coming outside he did not see anyone, so ran up the crew's stairway to "C" deck. He there saw three men, one of whom was the captain, at the after doors on the port side. Here he observed, through a broken window, a woman in a stateroom. He pulled the glass out of the frame, knocked down the shutter and pulled the lady out. She told him there was another woman inside and he found her curled up on the floor. As there was flame outside the cabin door in the corridor, he first played a hose into the room and then with the aid of a wheelsman and a bus boy, got the woman out and took her as far as the crew stairway. This lady reached hospital but died shortly after. About this

time Brown was told by the captain to break windows in the cabins in the same area, which he accordingly did. Brown says he waited until there was no one whatever where he was except the captain and one other and then, the water pressure in the hose he had having gone off completely, he went down to "D" deck from the stern of which he got off by a ladder to the dock, first going to his room for some clothes. He said that at this time he had no idea of the loss of life. He thought that people had been getting off.

Fournier, an oiler who was not on duty, was in his room in the engine room quarters when he heard the call of "fire". He proceeded up to "D" deck forward of the central stairway and there observed a fireman, Wade, pulling down a hose and he turned on the valve for him. He did not see any hose that he himself could get at that point so he went forward, and as he did so, met passengers coming down the forward stairs from "C" deck. Fournier went up these stairs to "C" deck but could not see anything on account of smoke, so he went out on the starboard side of the deck, through the forward doors and around to the port side where he encountered fire about two-thirds of the way back to the central doors. Here he took down a hose and fought the fire for a time but the pressure in the hose ran out and seeing that there were passengers in the cabins opposite him who were calling for assistance, he immediately went there, pulled off the metal screens, broke the windows and helped the occupants out of three rooms. He then looked in all the rooms going forward as it was not possible for him to go aft because the deck was "just about burning up". When he reached the bow he assisted in calming passengers and was sent down by Wood to the windlass room in the bow of "D" deck below to "see if the hose there was working". He did so and found that that hose was not working. There was no pressure in it. He reported this to Wood and then helped the boat swain get the last women overboard, after which he was ordered down a rope by Wood.

Emmons, a wheelsman, who had been ashore, had returned to the dock about 1.20 a.m. and saw smoke and flame coming out of the ship aft before he had reached the gangplank. He ran up to "D" deck, and seeing some movement aft went back and found three ladies and led them down onto the dock. Returning again to "D" deck he helped the fireman, Wade, with another hose which he picked up from the floor. Wade left shortly after this and Emmons also went to the aft stairway where he stayed until "I couldn't stay any longer". He then dropped his hose with the intention of going to "C" deck but when he got to the centre stairs there was nothing but a mass of flames at the top and he went down to "E" deck where he found the gangplank and the dock itself on fire. He therefore turned to the port side where he found five or six Chinamen, two maids, a waitress and a beliboy (no doubt Eddy) trying to open number five gangway door on that side. Emmons says he took a wrench and opened it for them when a small boat came and took them off.

Shepley, another wheelsman, was asleep when he was awakened by Donaldson. He followed Donaldson out of the room when he went to awaken the waitresses and later to the boat. He says, however, that passengers "trampled him down" and he left. He got down to "C" deck on the port side of which he saw Brown and a bus boy helping people out of rooms. He then went further up where he aided the captain. His subsequent movements have already been described.

Engine Room Crew

Here, there were six men on duty under the third engineer. Pierson, an oiler, went up to his hydrant, which was outside and aft on the starboard side of "C" deck. He says that when he reached it, he did not "see anything", so returned to the engine room and ultimately got to "D" deck where he pounded on the doors of some of the passenger cabins forward of the main stairway. He also used a

hose on the stairway itself until he was forced away by the smoke. He then went off the ship, taking time to go to his room for some clothes.

Wade, a fireman, tried to go to his fire station also on the port side of "C" deck, amidships, but found so much smoke on the crew stairs from "D" to "C" that he returned to the engine room and proceeded forward and up the center stairs to "D" deck. Here he and another fireman, Smith, used a hose on the stairs going up to "C" deck and the wall beyond, until Wade heard a passenger call for help below him on "D" deck. He dropped his hose and on going down to the spot, he found a man standing outside a cabin door who said there was someone inside. Wade obtained a fire extinguisher and broke down the door of that cabin and the one next to it, without finding anyone inside. He then returned to where he had left the hose, finding that Smith had left and both hose were lying on the deck. Wade picked up the larger one but found that there was no pressure in it. He therefore dropped it and left the ship. Later, he returned to his quarters on "E" deck for some clothes.

The fire hydrant of McNeil, another fireman, was on the port side of "C" deck forward. He also could not get to "C" deck on account of the heavy smoke coming down the crew stairway. He therefore went back down through the engine room and off the ship. The experience of Girard, another fireman, was similar.

These men, acting without direction, reacted as might be expected, their thought of arousing passengers or fellow crewmen, or of rescuing the Ship's Articles, depending upon the character of the individual.

Of the 94 persons who had staterooms on "A" deck, 55 are dead and 9 are missing; of the 149 on "C" deck, 48 are dead and 5 are missing, while of the 281 on "D" deck only one perished. It is to be observed that many of the persons who are either dead or missing occupied staterooms where, according to the evidence, attempts were made to arouse the occupants by knocking on the doors or breaking windows. It cannot be said that in all instances where fatalities occurred to such people, they were actually in their rooms, as the firemen removed some bodies from "B" deck, on which there are no staterooms. These people had either gone down there from "A" deck or up from "C". It is clear however, that numbers of persons were in their rooms when these warnings were given and must have already been overcome in the way described by Professor Rogers. The speed of the conflagration was very great. While it was discovered probably shortly after 1.30 a.m., by the time the second reels arrived at 1.44 it was so advanced that, in the opinion of the district fire chief, no one could have been alive on board except the eight or ten people still gathered in the bow of "C" deck, who were taken off on the ladders.

There are a number of reasons why there was no loss among the crew. The officers who occupied the forward end of "A" deck were roused by the alarm bell. This bell rang simultaneously in the engine room. Others of the crew had their quarters either in the extreme bow on "D" deck or at the stern of "A", "B" and "D" decks. They all appear to have been warned by some of their fellows and, once roused, as they were familiar with the interior of the ship, they could, the more easily, find their way out. Further, the wind was blowing on the port quarter from stern to starboard bow, which made the stern the safest place for the longest time.

It should be borne in mind also, that apart from the fifteen who were required to be on the ship, all of the remainder of the crew had been free to go ashore. The evidence does not establish how many had not availed themselves of this right.

OUESTIONS PROPOUNDED

The questions propounded for the opinion of the court are answered as follows:

1. Who were the owners of the S. S. "Noronic" at the time of the fire which destroyed the vessel on September 17, 1949, at Toronto, Ontario?

Answer:

Canada Steamship Lines Limited.

2. When and where was the S. S. "Noronic" built? Of what materials was the vessel constructed, and what were her principal dimensions and tonnage?

Answer:

The ship, which had five decks, including the main or freight deck, was built at Port Arthur, Ontario in 1913. The hull was of steel with considerable wood in the cabins, partitions, doors, decks, panelling, etc. According to the transcript of register, the principal dimensions are:

Length — 362 feet B.P.

Breadth — 52 feet

Depth — 28 feet 9 inches

Gross Tonnage — 6905.18

Registered Tonnage — 3935.46

3. How long had the present owners been in possession of the S. S. "Noronic", and from whom and when was she purchased?

Answer:

Since November 11, 1918, having been acquired from Northern Navigation Company, Limited, a wholly-owned subsidiary of the present owners.

4. What alterations were made in the passenger and crew accommodation of the vessel since purchased by her present owners?

Answer:

The interior of the after portions of "A", "B", "C" and "D" decks have been re-designed.

5. On how many decks were passengers and crew accommodated in the vessel? To what extent did passenger and crew accommodation extend on the decks? By what regular or other means could passengers and crew have access to and make exit from their accommodation to the outside decks?

Answer:

Passengers were accommodated in the central portions of "A" and "D" decks and on all of "C" deck. The extreme forward and after ends of "A" and "D" decks were taken up by crew quarters. "B" deck was occupied by the kitchen and crew quarters aft and the dining and observation rooms forward. "E" deck was the freight deck, the central portion of which formed an entrance hall for passengers.

For the crew there was in the stern of the ship a stairway which extended from "A" deck down through all the intervening decks to "E" deck.

For passengers there was (a) in the after part of the passenger quarters on "D" deck a stairway leading to "A" deck; (b) amidships, and commencing

at "E" deck, the main passenger stairway went up through the center of the ship to "C" deck, from which deck there were stairs on each side amidships leading up to "A" deck; (c) from the forward end of "D" deck aft of the crew quarters a stairway led up to "B" deck; and (d) there was also a stairway outside in the bow of the ship leading down from "A" deck to "C" deck, from which deck it led into the windlass room in the bow of "D" deck.

6. How many passengers and crew was the S. S. "Noronic" certificated or licensed to carry, and by what authority was the vesselso certificated or licensed?

Answer:

By inspection certificate dated April 23, 1949, issued by the Department of Transport, the ship was certified as fit to ply as an Inland Steamship Class one with 600 passengers and 200 crew. The certificate, unless previously cancelled, was to remain in force until April 23, 1950.

7. How many passengers and crew were on board the S. S. "Noronic" when the vessel arrived at Toronto on the night of Friday, 16th September, 1949?

Answer:

524 passengers and 171 crew.

8. How many passengers and crew terminated their voyage or service when the vessel arrived at Toronto on the night of Friday, 16th September, 1949?

Answer:

Two passengers and two of the crew.

9. How many passengers and crew joined the ship on the night of Friday, 16th September, 1949, before fire was discovered?

Answer:

Three passengers. There were no additions to the crew.

10. What was the distribution of the passengers and crew on the plan of accommodation prior to the discovery of the fire which destroyed the vessel?

Answer:

On "A" deck 94 passengers—on "C" deck 149, and on "D" deck 281. The distribution of the crew is dealt with under number 5 above.

11. At what time did the S. S. "Noronic" arrive and at what pier did she berth at Toronto on the night of Friday, 16th September, 1949? What was the purpose of the vessel's call at Toronto, and on what voyage was she engaged at the time of the casualty?

Answer:

The "Noronic" arrived at pier 9 of the Canada Steamship Lines at approximately 6.00 p.m., standard time, of September 16th, intending to sail at 7.00 p.m. on the 17th. The purpose of the call at Toronto was to give passengers an opportunity to visit the city. The voyage had commenced at Detroit at 11.00 p.m. on September 14th and the ship was scheduled to return to Detroit by 7.00 a.m. on September 21st following, after proceeding to Prescott, Ontario.

12. What members of the crew were on watch when the fire was discovered? Who was in charge? Where were they stationed and what were their duties?

Answer:

Fifteen members of the crew were on duty, divided into three sections, the second officer being the officer in charge. Of the forward or deck watch, one wheelsman was to be on duty in or about the pilot house above "A" deck forward, and another wheelsman on duty at the main passenger gangplank amidships on "E" deck; a man called a "watchman" was to be engaged cleaning up "E" deck and sounding the ballast tanks on "E" deck and in the forward end of "D" deck. The engine room watch consisted of the third engineer in charge, one oiler, one water tender and four firemen, their duties being confined to the engine and boiler rooms. The steward's crew consisted of four bellboys, one of whom was expected to be outside the steward's office amidships on "D" deck for the purpose of answering bells, while the remainder were to clean the observation room or dance hall forward on "B" deck and thereafter to sweep up the other decks, not including "E" deck.

13. When fire was discovered in the S. S. "Noronic" what action was taken by those on watch or by other persons to sound the alarm and give warning of danger? What was done to control, localize and extinguish the fire?

Answer:

The head bellboy, whose attention was called by a passenger to smoke issuing from the port linen locker on "C" deck, endeavoured unsuccessfully, together with this passenger to extinguish it, first, by using a fire extinguisher, and later, by the use of a hose, which, however, they did not succeed in putting into operation. Thereafter the bellboy rang an alarm which sounded in the officers' quarters forward on "A" deck, in the steward's quarters on "D" deck and in the engine room, The first officer who was in his quarters, proceeded up to the pilot house where he threw in the switch which sounded electric klaxon horns located at various places throughout the ship. He followed this by blowing the whistle, which, because of some failure of the controlling mechanism, blew thereafter continuously. Various local efforts were made by members of the crew with hoses to control the fire in several localities throughout the ship, but the fire had already gained such headway that these were, at most, delaying in effect.

14. What type of alarm system was installed in the S. S. "Noronic"? When was it installed? When was the system last inspected? Was it in good working order on the night of 16th September, 1949? If not, in what way was it defective?

Answer:

The alarm system consisted of a number of boxes located in various positions throughout the ship. By means of the breaking of a glass pane in these the alarm bells above described were electrically sounded. Thereafter it depended upon the judgment of the officer on duty in or about the pilot house whether or not the klaxon horns located throughout the ship and controlled by a switch in the pilot house, would be immediately sounded or whether he would first go to inspect the location and nature of the fire. The system had been inspected during the current season and was in good working order on the night of the 16th of September, 1949.

15. When fire was discovered on the S. S. "Noronic" was all possible and proper action taken to save life, to fight, control, localize, and extinguish the fire? If not, in what way and to what extent was the action taken, if any, defective or inadequate?

Answer:

The action taken for the above purposes by the ordinary crew members was no doubt such action as they would be expected to take without direction in such circumstances, no officer of the ship having taken charge of the situation or having attempted to give any general directions, if such was possible at the advanced stage which the fire had reached when the alarm was given.

16. If all possible and proper action was not taken or was not taken soon enough to save life, and fight, control, localize, and extinguish the fire, was the Master or any other person or persons on the vessel to blame? If so, whom?

Answer:

After the alarm had been given the only thing it might have been possible to do, which was not done, was for the Master to have taken general charge of the situation and directed in an organized way the arousing of passengers, instead of acting himself as an ordinary sailor in such parts of the ship as he could reach.

17. Were the fire fighting appliances on board the S. S. "Noronic" adequate? Had they been found satisfactory and in good working order? If so, when and where were they last tested and found satisfactory and in good working order?

Answer:

The fire fighting appliances on board appear to have been satisfactory and in good working order. The last departmental inspection was on April 23, 1949. Some of the fire hydrants (probably all the outside ones, but none of those inside) and a few of the fire extinguishers had been used since that time.

18. How many of the crew of the S. S. "Noronic" were lost or injured? How many are missing?

Answer:

There were no losses among the crew.

19. What was the cause of the loss of the S. S. "Noronic" and the cause of the loss of life?

Answer:

The loss of the S. S. "Noronic" and the loss of life was due to the failure on the part of the owners and the Master to have:

- (a) a continuous patrol of the ship for the purpose of detecting the presence of fire, such patrol as was in existence being limited to approximately fifteen minutes out of every hour;
- (b) in failing to have any organization operative when the ship was in dock with passengers on board by which information as to the outbreak of fire could be promptly despatched to some point from which men trained in the methods of dealing with fire could be immediately despatched to the locality;
- (c) in failing to contemplate in any real sense the possibility of fire occurring at a dock and maintaining only fifteen actually on duty out of a crew of one hundred and seventy-one, the others being free to go ashore and who might be, so far as the Master or the officer on duty knew, actually on shore;
- (d) in failing to have any plan for arousing and getting the passengers off the ship in the event of fire while the ship was at dock;

- (e) in failing to train the crew as to the proper steps to be taken on discovery of fire or in fire fighting methods beyond giving them a knowledge of how to operate fire extinguishers and hoses.
- 20. Was the loss of the S. S. "Noronic" and the loss of life caused or contributed to by the wrongful act or default of the owners, Canada Steamship Lines, Limited, the Master, Captain William Taylor, or any other person or persons?

Answer:

The loss of the S. S. "Noronic" and the loss of life was caused by the wrongful default of the owners and of the Master in the respects mentioned in the answers to the last question. While it is true that the owners knew and approved of the organization, or lack of it, designed to deal with the outbreak of fire on the ship while it lay in dock with sleeping passengers on board, the Master was not in any way precluded by any instructions from the owners from taking the proper steps himself.

Under the provisions of section 561 (1) (a) of the statute, the certificate of a master, mate or engineer, may, with the concurrence of at least one of the assessors, be cancelled or suspended if the court finds that the loss of life has been caused by his "wrongful act or default". In considering the standard to be applied, I have not approached the matter from the standpoint either of civil liability in damages, nor of criminal responsibility. In my opinion, the standard to be applied, whether or not it be involved in either of the above. may be stated as follows, namely, that any person placed in a situation in which his conduct may affect the safety of others, must take all reasonable precautions to guard against the risk to them arising therefrom. Judged by such standard, the conduct of both the owners and the Master falls short in the particulars I have mentioned. I therefore have come to the conclusion that the certificate of the Master should be suspended for a period of one year from the date of this judgment and I so order. Further, under the jurisdiction conferred by section 563 (1), which provides that the court may make such order as it thinks fit respecting the costs of the investigation, I think the circumstances render this a fitting case in which the costs of this investigation should be paid by the owners. I cannot think that any reasonable person, charged with the safety of sleeping passengers, could have failed to realize that something in the nature of what actually happened would be likely to happen in the circumstances existing on the ship here in question on the night of the 16th of September, 1949, had he really applied his mind to such a situation. The costs will be taxed on the scale of the Exchequer Court, so far as applicable. I do not interfere with the certificates of either the first or second officer, as they should have had a direction from higher up, which they did not receive, although the second officer, who was the officer of the watch, showed no more resource nor initiative than did the Master.

RECOMMENDATIONS

While anything in the way of recommendation for the future probably arises fairly obviously upon a review of the circumstances covered by this report, it may be of value to gather them together in one place. The following are therefore submitted for consideration in connection with ships carrying more than a minimum of passengers on the major fresh waters:

- 1. That the provisions as to fire resisting bulkheads in Regulation XVI of the International Convention for the Safety of Life at Sea be made applicable to such ships.
- 2. That the provisions of Regulations XLIII of the said Safety Convention, as to the maintenance of an efficient and continuous fire patrol system as well as an *automatic* fire alarm or fire detecting system be made applicable but such alarm or detecting system should not be restricted to parts of the ship not accessible to the patrol system.
- 3. That the provisions of Regulation XLIV as to muster lists and the assigning of special duties to different members of the crew in connection with the matters therein mentioned, including:
 - (a) the muster of passengers;
 - (b) the extinction of fire;
 - (c) warning of passengers;
 - (d) assembling of passengers at muster stations;
 - (e) keeping order in the passages and on the stairways and generally controlling the movements of passengers,

be applied. This will necessarily require adequate training of the crew in methods of fire fighting, together with the setting up of and maintenance of an effective organization for despatching men so trained to the seat of fire at the earliest possible moment.

- 4. That such ships be fitted with a sprinkler system protecting all enclosed parts of the vessel.
- 5. Muster charts should be prominently displayed in order that each member of the crew may become familiar, not only with his own duties and fire and boat stations, but with those of the crew who are to work with him.

- 6. That such ships be fitted with a public address system for directing passengers in an emergency and that the proper officers be trained as to its use.
- 7. That ships at dock should provide adequate and more than a single means of exit to shore.
- 8. That passenger ships docking with the intention of remaining for any extended time be required to be connected with the local telephone system so that the aid of the local fire department may be obtained without delay.

Respectfully submitted,

(Sgd.) R. L. Kellock

Commissioner.

We concur:

(Sgd.) Hugh S. Kane Assessor

(Sgd.) R. MITCHELL Assessor

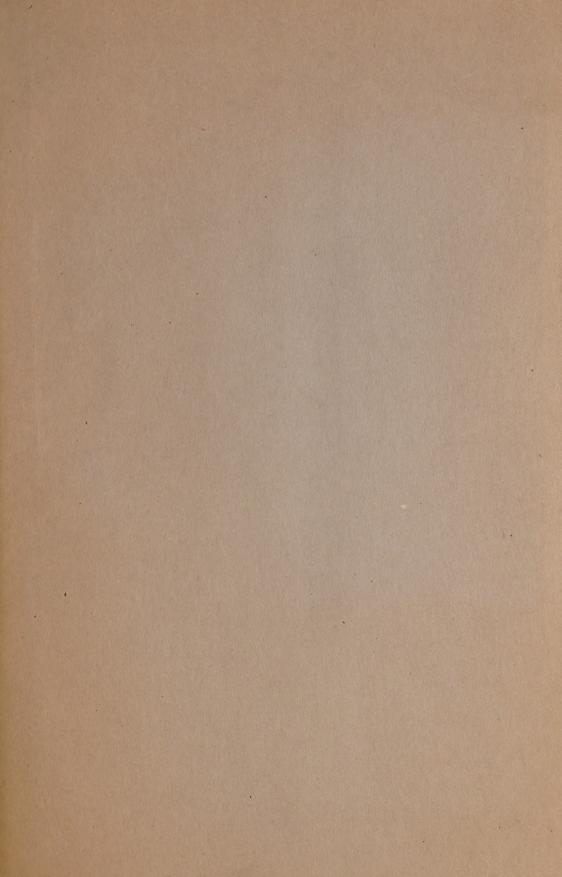
(Sgd.) Neil B. Gebbie Assessor

Dated at Ottawa this 21st day of November, 1949.











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